

Author Index for Volumes 94–99

- Abdallah, C., Chorowicz, J., Bou Kheir, R. and Khawlie, M.: Detecting major terrain parameters relating to mass movements' occurrence using GIS, remote sensing and statistical correlations, case study Lebanon 99:448
- Abrams, M.: *See* Gillespie, A.
- Abrams, M.: *See* Pieri, D.
- Abrams, M.J.: *See* Kargel, J.S.
- Abuelgasim, A.: *See* Fraser, R.H.
- Acker, S.A.: *See* Lefsky, M.A.
- Ackerman, D.: *See* Nezhlin, N.P.
- Adiku, S.: *See* Wang, Q.
- Agreil, M.: *See* Pasqualini, V.
- Ahl, D.E., Gower, S.T., Mackay, D.S., Burrows, S.N., Norman, J.M. and Diak, G.R.: The effects of aggregated land cover data on estimating NPP in northern Wisconsin 97:1
- Akhmedov, B.: *See* Doraiswamy, P.C.
- Akyürek, Z.: *See* Tekeli, A.E.
- Alonso, L.: *See* Louis, J.
- Alpers, W.: *See* Evans, D.L.
- Andersen, H.-E., McGaughey, R.J. and Reutebuch, S.E.: Estimating forest canopy fuel parameters using LIDAR data 94:441
- Anderson, J.E.: *See* Carter, G.A.
- Anderson, M.C.: *See* French, A.N.
- Anstee, J.M.: *See* Dekker, A.G.
- Antoine, D.: *See* Nobileau, D.
- Anttila, S.T.: *See* Metsämäki, S.J.
- Arda Şorman, A.: *See* Tekeli, A.E.
- Arnaud, Y.: *See* Berthier, E.
- Arora, M.K.: *See* Kasetkasem, T.
- Arora, M.K.: *See* Xu, M.
- Asner, G.P., Carlson, K.M. and Martin, R.E.: Substrate age and precipitation effects on Hawaiian forest canopies from spaceborne imaging spectroscopy 98:457
- Asner, G.P., Elmore, A.J., Flint Hughes, R., Warner, A.S. and Vitousek, P.M.: Ecosystem structure along bioclimatic gradients in Hawai'i from imaging spectroscopy 96:497
- Arora, M.K.: *See* Xu, M.
- Atzberger, C.: *See* Schlerf, M.
- Bacour, C. and Bréon, F.-M.: Variability of biome reflectance directional signatures as seen by POLDER 98:80
- Baghdadi, N.: *See* Holah, N.
- Baghdadi, N.: *See* Zribi, M.
- Bailey, S.W.: *See* Werdell, P.J.
- Bain, H.: *See* Cardoso, M.F.
- Baird, A.J.: *See* Harris, A.
- Balick, L.K.: *See* Mushkin, A.
- Ballantine, J.-A.C., Okin, G.S., Prentiss, D.E. and Roberts, D.A.: Mapping North African landforms using continental scale unmixing of MODIS imagery 97:470
- Baratoux, D.: *See* Berthier, E.
- Baret, F.: *See* Koetz, B.
- Baret, F.: *See* Zhang, Q.
- Barillé, L.: *See* Combe, J.-P.
- Barnsley, M.: *See* Hese, S.
- Barnsley, M.J.: *See* Los, S.O.
- Barr, A.G.: *See* Drolet, G.G.
- Barrow, T.: *See* Dall'Olmo, G.
- Bauer, H.: *See* Wulfmeyer, V.
- Bauer, M.: Appointment of new editorial board members 95:413
- Bauer, M.E.: *See* Thoma, D.P.
- Bauer, M.E.: *See* Wu, J.
- Bauer, M.E.: *See* Yuan, F.
- Beck, P.S.A., Kalmbach, E., Joly, D., Stien, A. and Nilsen, L.: Modelling local distribution of an Arctic dwarf shrub indicates an important role for remote sensing of snow cover 98:110
- Becker, B.L., Lusch, D.P. and Qi, J.: Identifying optimal spectral bands from in situ measurements of Great Lakes coastal wetlands using second-derivative analysis 97:238
- Becker, M.W. and Daw, A.: Influence of lake morphology and clarity on water surface temperature as measured by EOS ASTER 99:288
- Bergen, K.M., Brown, D.G., Rutherford, J.F. and Gustafson, E.J.: Change detection with heterogeneous data using ecoregional stratification, statistical summaries and a land allocation algorithm 97:434
- Berjón, A.: *See* Zarco-Tejada, P.J.
- Berterretche, M., Hudak, A.T., Cohen, W.B., Maersperger, T.K., Gower, S.T. and Dungan, J.: Comparison of regression and geostatistical methods for mapping Leaf Area Index (LAI) with Landsat ETM+ data over a boreal forest 96:49
- Berthier, E., Vadon, H., Baratoux, D., Arnaud, Y., Vincent, C., Feigl, K.L., Rémy, F. and Legrésy, B.: Surface motion of mountain glaciers derived from satellite optical imagery 95:14
- Berthon, J.-F.: *See* Mélin, F.
- Bigg, G.R.: *See* Silva, T.A.M.
- Biging, G.S.: *See* Neeff, T.
- Bijker, W.: *See* Tapia, R.
- Binding, C.E., Bowers, D.G. and Mitchelson-Jacob, E.G.: Estimating suspended sediment concentrations from ocean colour measurements in moderately turbid waters; the impact of variable particle scattering properties 94:373
- Bindschadler, R., Choi, H., Shuman, C. and Markus, T.: Detecting and measuring new snow accumulation on ice sheets by satellite remote sensing 98:388
- Bishop, M.P.: *See* Kargel, J.S.
- Bisht, G., Venturini, V., Islam, S. and Jiang, L.: Estimation of the net radiation using MODIS (Moderate Resolution Imaging Spectroradiometer) data for clear sky days 97:52
- Black, T.A.: *See* Drolet, G.G.
- Blaes, X., Vanhale, L. and Defourmy, P.: Efficiency of crop identification based on optical and SAR image time series 96:352
- Blair, J.B.: *See* Hyde, P.
- Blanco, P.: *See* Tomás, R.
- Boles, S.: *See* Xiao, X.
- Bollandsas, O.M.: *See* Næsset, E.
- Bou Kheir, R.: *See* Abdallah, C.
- Bousquet, L., Lachérade, S., Jacquemoud, S. and Moya, I.: Leaf BRDF measurements and model for specular and diffuse components differentiation 98:201
- Bowers, D.G.: *See* Binding, C.E.
- Box, J.E.: *See* Stroeve, J.
- Boyd, P.W.: *See* Pinkerton, M.H.

- Bradford, J.B., Hicke, J.A. and Lauenroth, W.K.: The relative importance of light-use efficiency modifications from environmental conditions and cultivation for estimation of large-scale net primary productivity 96:246
- Bradley, B.A. and Mustard, J.F.: Identifying land cover variability distinct from land cover change: Cheatgrass in the Great Basin 94:204
- Brando, V.E.: *See* Dekker, A.G.
- Braswell, B.: *See* Zhang, Q.
- Braswell, B.H.: *See* Diner, D.J.
- Brekke, C. and Solberg, A.H.S.: Oil spill detection by satellite remote sensing 95:1
- Bréon, F.-M.: *See* Bacour, C.
- Breshears, D.D.: *See* Stimson, H.C.
- Brisette, F.: *See* Temimi, M.
- Brock, J.C.: *See* Hu, C.
- Brooks, D.: *See* White, J.C.
- Brossard, T.: *See* Moreau, M.
- Brown, D.G.: *See* Bergen, K.M.
- Brown, E.: *See* Montes-Hugo, M.A.
- Brown, R.: *See* Wang, L.
- Bruand, A.: *See* Holah, N.
- Brunsell, N.: *See* French, A.N.
- Bryant, R.G.: *See* Harris, A.
- Buongiorno Nardelli, B., Marullo, S. and Santoleri, R.: Diurnal variations in AVHRR SST fields: A strategy for removing warm layer effects from daily images 95:47
- Burnett, C.N.: *See* Leckie, D.G.
- Burrows, S.N.: *See* Ahl, D.E.
- Bush, A.: *See* Kargel, J.S.
- Butson, C.: *See* Olthof, I.
- Cabot, F.: *See* Hagolle, O.
- Cachorro, V.: *See* Zarco-Tejada, P.J.
- Calvin, W.M.: *See* Vaughan, R.G.
- Campbell, J.W.: *See* Feng, H.
- Cannizzaro, J.: *See* Montes-Hugo, M.A.
- Carbognin, L.: *See* Teatini, P.
- Carder, K.: *See* Montes-Hugo, M.A.
- Carder, K.L.: *See* Hu, C.
- Cardoso, M.F., Hurt, G.C., Moore III, B., Nobre, C.A. and Bain, H.: Field work and statistical analyses for enhanced interpretation of satellite fire data 96:212
- Carlson, K.M.: *See* Asner, G.P.
- Carranza, E.J.M.: *See* Debba, P.
- Carrère, V.: *See* Combe, J.-P.
- Carter, G.A., Knapp, A.K., Anderson, J.E., Hoch, G.A. and Smith, M.D.: Indicators of plant species richness in AVIRIS spectra of a mesic grassland 98:304
- Casa, R. and Jones, H.G.: LAI retrieval from multiangular image classification and inversion of a ray tracing model 98:414
- Caselles, V.: *See* Coll, C.
- Caselles, V.: *See* Niclòs, R.
- Cazenave, A.: *See* Evans, D.L.
- Cazenave, A.: *See* Frappart, F.
- Chang, A.: *See* Foster, J.L.
- Chaouch, N.: *See* Temimi, M.
- Chen, D., Huang, J. and Jackson, T.J.: Vegetation water content estimation for corn and soybeans using spectral indices derived from MODIS near- and short-wave infrared bands 98:225
- Chen, J., Yuan Zhang, M., Wang, L., Shimazaki, H. and Tamura, M.: A new index for mapping lichen-dominated biological soil crusts in desert areas 96:165
- Chen, J.M., Menges, C.H. and Leblanc, S.G.: Global mapping of foliage clumping index using multi-angular satellite data 97:447
- Chen, X., Vierling, L. and Deering, D.: A simple and effective radiometric correction method to improve landscape change detection across sensors and across time 98:63
- Chen, Z.: *See* Hu, C.
- Choi, H.: *See* Bindschadler, R.
- Chorowicz, J.: *See* Abdallah, C.
- Christiansen, M.B. and Hasager, C.B.: Wake effects of large offshore wind farms identified from satellite SAR 98:251
- Chuvieco, E., Ventura, G., Martín, M.P. and Gómez, I.: Assessment of multitemporal compositing techniques of MODIS and AVHRR images for burned land mapping 94:450
- Clark, D.B.: *See* Clark, M.L.
- Clark, M.L., Roberts, D.A. and Clark, D.B.: Hyperspectral discrimination of tropical rain forest tree species at leaf to crown scales 96:375
- Clarke, T.R.: *See* Fitzgerald, G.J.
- Clayton, T.D.: *See* Hu, C.
- Cleverly, J.: *See* Nagler, P.L.
- Cleverly, J.R.: *See* Nagler, P.L.
- Cochrane, M.A.: *See* Souza Jr., C.M.
- Cohen, W.B.: *See* Berterretche, M.
- Cohen, W.B.: *See* Healey, S.P.
- Cohen, W.B.: *See* Lefsky, M.A.
- Cohen, Y. and Shoshany, M.: Analysis of convergent evidence in an evidential reasoning knowledge-based classification 96:518
- Coll, C., Caselles, V., Galve, J.M., Valor, E., Niclòs, R., Sánchez, J.M. and Rivas, R.: Ground measurements for the validation of land surface temperatures derived from AATSR and MODIS data 97:288
- Coll, C.: *See* Niclòs, R.
- Combe, J.-P., Launeau, P., Carrère, V., Despan, D., Méléder, V., Barillé, L. and Sotin, C.: Mapping microphytobenthos biomass by non-linear inversion of visible-infrared hyperspectral images 98:371
- Conard, S.G.: *See* Sukhinin, A.I.
- Crane, M.: *See* Xian, G.
- Cripps, J.C.: *See* Fernandes da Silva, P.C.
- Crowley, J.K.: *See* Hubbard, B.E.
- Csiszar, I.A.: *See* Sukhinin, A.I.
- Cudahy, T.J.: *See* Hewson, R.D.
- Cudahy, T.J.: *See* Ninomiya, Y.
- Cuomo, V.: *See* Lacava, T.
- Cuomo, V.: *See* Tramutoli, V.
- Da Costa Freitas, C.: *See* Neeff, T.
- Dall'Omo, G., Gitelson, A.A., Rundquist, D.C., Leavitt, B., Barrow, T. and Holz, J.C.: Assessing the potential of SeaWiFS and MODIS for estimating chlorophyll concentration in turbid productive waters using red and near-infrared bands 96:176
- Dash, P., Göttsche, F.-M., Olesen, F.-S. and Fischer, H.: Separating surface emissivity and temperature using two-channel spectral indices and emissivity composites and comparison with a vegetation fraction method 96:1
- Datt, B.: *See* Van Niel, T.G.
- Davies, R.: *See* Diner, D.J.
- Daw, A.: *See* Becker, M.W.
- Dawson, T.P.: *See* Ingram, J.C.
- De Alencastro Graça, P.M.: *See* Neeff, T.
- De Camargo, P.: *See* Xiao, X.
- De Frutos, A.: *See* Zarco-Tejada, P.J.
- De Pereyra, A.: *See* Hagolle, O.
- Debba, P., van Ruitenbeek, F.J.A., van der Meer, F.D., Carranza, E.J.M. and Stein, A.: Optimal field sampling for targeting minerals using hyperspectral data 99:373
- Deering, D.: *See* Chen, X.
- Defourny, P.: *See* Blaes, X.
- Dekker, A.G., Brando, V.E. and Anstee, J.M.: Retrospective seagrass change detection in a shallow coastal tidal Australian lake 97:415
- Delbart, N., Kergoat, L., Le Toan, T., Lhermitte, J. and Picard, G.: Determination of phenological dates in boreal regions using normalized difference water index 97:26
- Delgado, J.: *See* Tomás, R.

- Delmas, D.: See Gohin, F.
Deng, X.: See Liu, J.
Derksen, C., Walker, A. and Goodison, B.: Evaluation of passive microwave snow water equivalent retrievals across the boreal forest/tundra transition of western Canada 96:315
Derksen, C.: See Wang, L.
Despan, D.: See Combe, J.-P.
Di Girolamo, P.: See Wulfmeyer, V.
Di Leo, E.V.: See Lacava, T.
Diak, G.R.: See Ahl, D.E.
DiGiacomo, P.M.: See Nezhin, N.P.
Diner, D.J., Braswell, B.H., Davies, R., Gobron, N., Hu, J., Jin, Y., Kahn, R.A., Knyazikhin, Y., Loeb, N., Muller, J.-P., Nolin, A.W., Pinty, B., Schaaf, C.B., Seiz, G. and Stroeve, J.: The value of multiangle measurements for retrieving structurally and radiatively consistent properties of clouds, aerosols, and surfaces 97:495
Diner, D.J., Martonchik, J.V., Kahn, R.A., Pinty, B., Gobron, N., Nelson, D.L. and Holben, B.N.: Using angular and spectral shape similarity constraints to improve MISR aerosol and surface retrievals over land 94:155
Dinh, N.Q.: See Wang, Q.
Dipotso, F.M.: See Smith, A.M.S.
Dmochowski, J.E.: See Hook, S.J.
Dobrowski, S.Z., Pushnik, J.C., Zarco-Tejada, P.J. and Ustin, S.L.: Simple reflectance indices track heat and water stress-induced changes in steady-state chlorophyll fluorescence at the canopy scale 97:403
Dobrowski, S.Z.: See Greenberg, J.A.
Dong, J., Walker, J.P. and Houser, P.R.: Factors affecting remotely sensed snow water equivalent uncertainty 97:68
Dong, J.: See Foster, J.L.
Doraiswamy, P.C., Sinclair, T.R., Hollinger, S., Akhmedov, B., Stern, A. and Prueger, J.: Application of MODIS derived parameters for regional crop yield assessment 97:192
Dos Santos, J.R.: See Neeff, T.
Dowell, M.D.: See Feng, H.
Drake, N.A.: See Smith, A.M.S.
Drolet, G.G., Huemmrich, K.F., Hall, F.G., Middleton, E.M., Black, T.A., Barr, A.G. and Margolis, H.A.: A MODIS-derived photochemical reflectance index to detect inter-annual variations in the photosynthetic light-use efficiency of a boreal deciduous forest 98:212
Drüe, C. and Heinemann, G.: Accuracy assessment of sea-ice concentrations from MODIS using in-situ measurements 95:139
Drummond, J.R.: See Liu, J.
Dubayah, R.: See Hese, S.
Dubayah, R.: See Hyde, P.
Duchemin, B.: See Hagolle, O.
Ducruet, J.-M.: See Louis, J.
Duguay, C.R.: See Théau, J.
Dungan, J.: See Berterretche, M.
Dutra, L.V.: See Neeff, T.
Dwyer, J.: See Gallo, K.
Dye, D.: See Hazarika, M.K.
Dye, D.G.: See Kobayashi, H.
Eidenshink, J.: See Gallo, K.
Eisner, W.R.: See Frohn, R.C.
Elachi, C.: See Evans, D.L.
Elmore, A.J.: See Asner, G.P.
Elvidge, C.D.: See Small, C.
Epting, J., Verbyla, D. and Sorbel, B.: Evaluation of remotely sensed indices for assessing burn severity in interior Alaska using Landsat TM and ETM+ 96:328
Evain, S.: See Louis, J.
Evans, D.L., Alpers, W., Cazenave, A., Elachi, C., Farr, T., Glackin, D., Holt, B., Jones, L., Liu, W.T., McCandless, W., Menard, Y., Moore, R. and Njoku, E.: Seasat—A 25-year legacy of success 94:384
Fafin, O.: See Zribi, M.
Falkowski, M.J.: See Smith, A.M.S.
Fang, H. and Liang, S.: A hybrid inversion method for mapping leaf area index from MODIS data: experiments and application to broadleaf and needleleaf canopies 94:405
Farr, T.: See Evans, D.L.
Feigl, K.L.: See Berthier, E.
Feng, H., Campbell, J.W., Dowell, M.D. and Moore, T.S.: Modeling spectral reflectance of optically complex waters using bio-optical measurements from Tokyo Bay 99:232
Fernandes, M.J.: See Lázaro, C.
Fernandes, R. and Leblanc, S.G.: Parametric (modified least squares) and non-parametric (Theil-Sen) linear regressions for predicting biophysical parameters in the presence of measurement errors 95:303
Fernandes, R.: See Olthof, I.
Fernandes da Silva, P.C., Cripps, J.C. and Wise, S.M.: The use of Remote Sensing techniques and empirical tectonic models for inference of geological structures: Bridging from regional to local scales 96:18
Ferrão, M.: See Sedano, F.
Feyen, J.: See Verstraeten, W.W.
Filizzola, C.: See Tramutoli, V.
Fischer, H.: See Dash, P.
Fitzgerald, G.J., Pinter Jr., P.J., Hunsaker, D.J. and Clarke, T.R.: Multiple shadow fractions in spectral mixture analysis of a cotton canopy 97:526
Flint Hughes, R.: See Asner, G.P.
Formaggio, A.R.: See Galvão, L.S.
Foster, J.L., Sun, C., Walker, J.P., Kelly, R., Chang, A., Dong, J. and Powell, H.: Quantifying the uncertainty in passive microwave snow water equivalent observations 94:187
Foy, R.J.: See Montes-Hugo, M.A.
Frappart, F., Seyler, F., Martinez, J.-M., León, J.G. and Cazenave, A.: Floodplain water storage in the Negro River basin estimated from microwave remote sensing of inundation area and water levels 99:387
Fraser, R.: See Olthof, I.
Fraser, R.H., Abuelgasim, A. and Latifovic, R.: A method for detecting large-scale forest cover change using coarse spatial resolution imagery 95:414
Freitas, C.C.: See Neeff, T.
French, A.N., Jacob, F., Anderson, M.C., Kustas, W.P., Timmermans, W., Gieske, A., Su, Z., Su, H., McCabe, M.F., Li, F., Prueger, J. and Brunsell, N.: Corrigendum to "Surface energy fluxes with the Advanced Spaceborne Thermal Emission and Reflection radiometer (ASTER) at the Iowa 2002 SMACEX site (USA)" [Remote Sensing of Environment 2005 99:1-2;55-65] 99:471
French, A.N., Jacob, F., Anderson, M.C., Kustas, W.P., Timmermans, W., Gieske, A., Su, Z., Su, H., McCabe, M.F., Li, F., Prueger, J. and Brunsell, N.: Surface energy fluxes with the Advanced Spaceborne Thermal Emission and Reflection radiometer (ASTER) at the Iowa 2002 SMACEX site (USA) 99:55
French, N.H.F.: See Sukhinin, A.I.
Frison, P.-L.: See Zine, S.
Frohn, R.C., Hinkel, K.M. and Eisner, W.R.: Satellite remote sensing classification of thaw lakes and drained thaw lake basins on the North Slope of Alaska 97:116
Froidfond, J.-M.: See Gohin, F.
Frolking, S.: See Xiao, X.
Fu, B.: See Ninomiya, Y.
Gall, M.P.: See Pinkerton, M.H.
Gallo, K., Ji, L., Reed, B., Eidenshink, J. and Dwyer, J.: Multi-platform comparisons of MODIS and AVHRR normalized difference vegetation index data 99:221
Galvão, L.S., Formaggio, A.R. and Tisot, D.A.: Discrimination of sugarcane varieties in Southeastern Brazil with EO-1 Hyperion data 94:523

- Galve, J.M.: See Coll, C.
- Gao, F.: See Stroeve, J.
- Garbeil, H.: See Mouginis-Mark, P.J.
- Garcia, C.A.E., Garcia, V.M.T. and McClain, C.R.: Evaluation of SeaWiFS chlorophyll algorithms in the Southwestern Atlantic and Southern Oceans 95:125
- Garcia, V.M.T.: See Garcia, C.A.E.
- Gatzolis, D.: See Laurent, E.J.
- Gautier, C.: See Wyser, K.
- Gieske, A.: See French, A.N.
- Gilbert, G.: See Levin, I.
- Gille, J.C.: See Liu, J.
- Gillespie, A., Abrams, M. and Yamaguchi, Y.: Scientific results from ASTER 99:1
- Gillespie, A.R.: See Mushkin, A.
- Giri, C., Zhu, Z. and Reed, B.: A comparative analysis of the Global Land Cover 2000 and MODIS land cover data sets 94:123
- Gitelson, A.A.: See Dall'Olmo, G.
- Glackin, D.: See Evans, D.L.
- Glenn, E.: See Nagler, P.L.
- Glenn, E.P.: See Nagler, P.L.
- Glenn, N.F., Mundt, J.T., Weber, K.T., Prather, T.S., Lass, L.W. and Pettingill, J.: Hyperspectral data processing for repeat detection of small infestations of leafy spurge 95:399
- Glenn, N.F.: See Mundt, J.T.
- Gobakken, T.: See Næsset, E.
- Gobron, N.: See Diner, D.J.
- Gogu, R.: See Metternicht, G.
- Gohin, F., Loyer, S., Lunven, M., Labry, C., Froidefond, J.-M., Delmas, D., Huret, M. and Herbland, A.: Satellite-derived parameters for biological modelling in coastal waters: Illustration over the eastern continental shelf of the Bay of Biscay 95:29
- Gómez, I.: See Chuvienco, E.
- Gómez, M., Olioso, A., Sobrino, J.A. and Jacob, F.: Retrieval of evapotranspiration over the Alpillis/ReSeDA experimental site using airborne POLDER sensor and a thermal camera 96:399
- Gong, P.: See Sedano, F.
- González, M.R.: See Zarco-Tejada, P.J.
- Goodison, B.: See Derksen, C.
- Goovaerts, P., Jacques, G.M. and Marcus, A.: Geostatistical and local cluster analysis of high resolution hyperspectral imagery for detection of anomalies 95:351
- Gopal, S.: See Ju, J.
- Gorelick, S.M.: See Loheide II, S.P.
- Göttsche, F.-M.: See Dash, P.
- Gougeon, F.A.: See Leckie, D.G.
- Gower, S.T.: See Ahl, D.E.
- Gower, S.T.: See Berterretche, M.
- Granier, A.: See Wang, Q.
- Greenberg, J.A., Dobrowski, S.Z. and Ustin, S.L.: Shadow allometry: Estimating tree structural parameters using hyperspatial image analysis 97:15
- Greenberg, J.A., Kefauver, S.C., Stimson, H.C., Yeaton, C.J. and Ustin, S.L.: Survival analysis of a neotropical rainforest using multitemporal satellite imagery 96:202
- Grey, W.M.F.: See Los, S.O.
- Grippa, M., Mognard, N. and Le Toan, T.: Comparison between the interannual variability of snow parameters derived from SSM/I and the Ob river discharge 98:35
- Guan, Y.: See Tang, J.
- Guérin, C.: See Le Hégarat-Masclé, S.
- Guérin, C.: See Zribi, M.
- Gupta, R.P., Haritashya, U.K. and Singh, P.: Mapping dry/wet snow cover in the Indian Himalayas using IRS multispectral imagery 97:458
- Gupta, S.C.: See Thoma, D.P.
- Gustafson, E.J.: See Bergen, K.M.
- Guzy, M.: See Lefsky, M.A.
- Hagolle, O., Lobo, A., Maisongrande, P., Cabot, F., Duchemin, B. and De Pereyra, A.: Quality assessment and improvement of temporally composited products of remotely sensed imagery by combination of VEGETATION 1 and 2 images 94:172
- Hall, F.G.: See Drolet, G.G.
- Hallett, R.: See Pontius, J.
- Hamilton, G.: See Kargel, J.S.
- Haritashya, U.K.: See Gupta, R.P.
- Harris, A., Bryant, R.G. and Baird, A.J.: Detecting near-surface moisture stress in *Sphagnum* spp. 97:371
- Harris, A.: See Simpson, J.J.
- Hasager, C.B.: See Christiansen, M.B.
- Hatt, C.: See Pozdnyakov, D.
- Hay, S.I.: See Tatem, A.J.
- Hazarika, M.K., Yasuoka, Y., Ito, A. and Dye, D.: Estimation of net primary productivity by integrating remote sensing data with an ecosystem model 94:298
- Healey, S.P., Cohen, W.B., Zhiqiang, Y. and Krankina, O.N.: Comparison of Tasseled Cap-based Landsat data structures for use in forest disturbance detection 97:301
- Heil, C.A.: See Hu, C.
- Heinemann, G.: See Drüe, C.
- Heinsch, F.A.: See Zhao, M.
- Heiskanen, J.: See Muukkonen, P.
- Hendrickx, J.M.H.: See Zhou, X.
- Herbland, A.: See Gohin, F.
- Herman, P.M.J.: See van der Wal, D.
- Herrera, G.: See Tomás, R.
- Hese, S., Lucht, W., Schimmlus, C., Barnsley, M., Dubayah, R., Knorr, D., Neumann, K., Riedel, T. and Schröter, K.: Global biomass mapping for an improved understanding of the CO₂ balance—the Earth observation mission Carbon-3D 94:94
- Hewson, J.H.: See Sukhinin, A.I.
- Hewson, R.D., Cudahy, T.J., Mizuhiko, S., Ueda, K. and Mauger, A.J.: Seamless geological map generation using ASTER in the Broken Hill-Curnamona province of Australia 99:159
- Hicke, J.A.: See Bradford, J.B.
- Hiernaux, P.: See Jarlan, L.
- Hiernaux, P.: See Zine, S.
- Hill, J.: See Koetz, B.
- Hill, J.: See Röder, A.
- Hill, J.: See Schlerf, M.
- Hinkel, K.M.: See Frohn, R.C.
- Hoch, G.A.: See Carter, G.A.
- Hofmann, M.: See Hyde, P.
- Hoge, F.E. and Lyon, P.E.: New tools for the study of oceanic eddies: Satellite derived inherent optical properties 95:444
- Holah, N., Baghdadi, N., Zribi, M., Bruand, A. and King, C.: Potential of ASAR/ENVISAT for the characterization of soil surface parameters over bare agricultural fields 96:78
- Holah, N.: See Zribi, M.
- Holben, B.N.: See Diner, D.J.
- Hollinger, S.: See Doraiswamy, P.C.
- Holt, B.: See Evans, D.L.
- Holz, J.C.: See Dall'Olmo, G.
- Hook, S.J., Dmochowski, J.E., Howard, K.A., Rowan, L.C., Karlstrom, K.E. and Stock, J.M.: Mapping variations in weight percent silica measured from multispectral thermal infrared imagery—Examples from the Hiller Mountains, Nevada, USA and Tres Virgenes-La Reforma, Baja California Sur, Mexico 95:273
- Hook, S.J.: See Steissberg, T.E.
- Hook, S.J.: See Vaughan, R.G.

- Houser, P.R.: See Dong, J.
- Howard, K.A.: See Hook, S.J.
- Hu, C., Chen, Z., Clayton, T.D., Swarzenski, P., Brock, J.C. and Muller-Karger, F.E.: Erratum to "Assessment of estuarine water-quality indicators using MODIS medium-resolution bands: Initial results from Tampa Bay, FL" [Remote Sensing of Environment 93(2004) 423-441] 94:425
- Hu, C., Muller-Karger, F.E., Taylor, C.(Judd), Carder, K.L., Kelble, C., Johns, E. and Heil, C.A.: Red tide detection and tracing using MODIS fluorescence data: A regional example in SW Florida coastal waters 97:311
- Hu, J.: See Diner, D.J.
- Huang, J.: See Chen, D.
- Hubbard, B.E. and Crowley, J.K.: Mineral mapping on the Chilean-Bolivian Altiplano using co-orbital ALI, ASTER and Hyperion imagery: Data dimensionality issues and solutions 99:173
- Hudak, A.T.: See Berterretche, M.
- Hudak, A.T.: See Lefsky, M.A.
- Hudak, A.T.: See Smith, A.M.S.
- Huemmrich, K.F.: See Drolet, G.G.
- Huete, A.: See Nagler, P.L.
- Huete, A.R.: See Nagler, P.L.
- Hunsaker, C.: See Hyde, P.
- Hunsaker, D.J.: See Fitzgerald, G.J.
- Huret, M.: See Gohin, F.
- Hurni, L.: See Metternicht, G.
- Hurt, G.C.: See Cardoso, M.F.
- Hutyra, L.: See Xiao, X.
- Hyde, P., Dubayah, R., Peterson, B., Blair, J.B., Hofton, M., Hunsaker, C., Knox, R. and Walker, W.: Mapping forest structure for wildlife habitat analysis using waveform lidar: Validation of montane ecosystems 96:427
- Hyer, E.J.: See Sukhinin, A.I.
- Im, J. and Jensen, J.R.: A change detection model based on neighborhood correlation image analysis and decision tree classification 99:326
- Ingram, J.C., Dawson, T.P. and Whittaker, R.J.: Mapping tropical forest structure in southeastern Madagascar using remote sensing and artificial neural networks 94:491
- Ishitsuka, N.: See Sakamoto, T.
- Ishizaka, J.: See Kishino, M.
- Islam, S.: See Bisht, G.
- Ito, A.: See Hazarika, M.K.
- Jackson, T.J.: See Chen, D.
- Jacob, F.: See French, A.N.
- Jacob, F.: See Gómez, M.
- Jacquemoud, S.: See Bousquet, L.
- Jacquez, G.M.: See Goovaerts, P.
- Jaquet, J.-M.: See Silverio, W.
- Jarlan, L., Mougín, E., Mazzega, P., Schoenauer, M., Tracol, Y., Hiernaux and P.: Using coarse remote sensing radar observations to control the trajectory of a simple Sahelian land surface model 94:269
- Jarlan, L.: See Zine, S.
- Jensen, J.R.: See Im, J.
- Ji, L.: See Gallo, K.
- Jiang, L.: See Bisht, G.
- Jiménez-Muñoz, J.C.: See Sobrino, J.A.
- Jin, S. and Sader, S.A.: Comparison of time series tasseled cap wetness and the normalized difference moisture index in detecting forest disturbances 94:364
- Jin, S. and Sader, S.A.: MODIS time-series imagery for forest disturbance detection and quantification of patch size effects 99:462
- Jin, Y.: See Diner, D.J.
- Jin, Y.: See Roy, D.P.
- Jiskoot, H.: See Kargel, J.S.
- Johns, E.: See Hu, C.
- Joly, D.: See Beck, P.S.A.
- Joly, D.: See Moreau, M.
- Jones, H.G.: See Casa, R.
- Jones, L.: See Evans, D.L.
- Jordan, G. and Schott, B.: Application of wavelet analysis to the study of spatial pattern of morphotectonic lineaments in digital terrain models. A case study 94:31
- Ju, J., Gopal, S. and Kolaczyk, E.D.: On the choice of spatial and categorical scale in remote sensing land cover classification 96:62
- Justice, C.O.: See Roy, D.P.
- Kääb, A.: See Kargel, J.S.
- Kääb, A.: Combination of SRTM3 and repeat ASTER data for deriving alpine glacier flow velocities in the Bhutan Himalaya 94:463
- Kaasalainen, S.: See Peltoniemi, J.I.
- Kahn, R.A.: See Diner, D.J.
- Kallio, K.Y.: See Kutser, T.
- Kalmbach, E.: See Beck, P.S.A.
- Kargel, J.S., Abrams, M.J., Bishop, M.P., Bush, A., Hamilton, G., Jiskoot, H., Kääb, A., Kieffer, H.H., Lee, E.M., Paul, F., Rau, F., Raup, B., Schroder, J.F., Soltesz, D., Stainforth, D., Stearns, L. and Wessels, R.: Multispectral imaging contributions to global land ice measurements from space 99:187
- Karlstrom, K.E.: See Hook, S.J.
- Kasetkasem, T., Arora, M.K. and Varshney, P.K.: Super-resolution land cover mapping using a Markov random field based approach 96:302
- Kasischke, E.S.: See Sukhinin, A.I.
- Kastens, D.L.A.: See Kastens, J.H.
- Kastens, J.H., Kastens, T.L., Kastens, D.L.A., Price, K.P., Martinko, E.A. and Lee, R.-Y.: Image masking for crop yield forecasting using AVHRR NDVI time series imagery 99:341
- Kastens, T.L.: See Kastens, J.H.
- Kato, S. and Yamaguchi, Y.: Analysis of urban heat-island effect using ASTER and ETM+ Data: Separation of anthropogenic heat discharge and natural heat radiation from sensible heat flux 99:44
- Kawamura, H.: See Shimada, T.
- Kawamura, H.: See Takahashi, W.
- Kefauver, S.C.: See Greenberg, J.A.
- Kefauver, S.C.: See Stimson, H.C.
- Kelble, C.: See Hu, C.
- Keller, C.: See Nelson, R.
- Keller, M.: See Xiao, X.
- Kelly, R.: See Foster, J.L.
- Kergoat, L.: See Delbart, N.
- Khawlie, M.: See Abdallah, C.
- Kieffer, H.H.: See Kargel, J.S.
- King, C.: See Holah, N.
- Kirchoff, C.E.: See Thoma, D.P.
- Kishino, M., Tanaka, A. and Ishizaka, J.: Retrieval of Chlorophyll *a*, suspended solids, and colored dissolved organic matter in Tokyo Bay using ASTER data 99:66
- Knapp, A.K.: See Carter, G.A.
- Knorr, D.: See Hese, S.
- Knox, R.: See Hyde, P.
- Knyazikhin, Y.: See Diner, D.J.
- Kobayashi, H. and Dye, D.G.: Atmospheric conditions for monitoring the long-term vegetation dynamics in the Amazon using normalized difference vegetation index 97:519
- Koetz, B., Baret, F., Poilvé, H. and Hill, J.: Use of coupled canopy structure dynamic and radiative transfer models to estimate biophysical canopy characteristics 95:115
- Kolaczyk, E.D.: See Ju, J.
- Korosov, A.: See Pozdnyakov, D.
- Krankina, O.N.: See Healey, S.P.
- Kuemmerle, T.: See Röder, A.
- Kumar, P.: See White, A.B.

- Kustas, W.P.: See French, A.N.
- Kutser, T., Pierson, D.C., Kallio, K.Y., Reinart, A. and Sobek, S.: Mapping lake CDOM by satellite remote sensing 94:535
- Labry, C.: See Gohin, F.
- Lacava, T., Cuomo, V., Di Leo, E.V., Pergola, N., Romano, F. and Tramutoli, V.: Improving soil wetness variations monitoring from passive microwave satellite data: The case of April 2000 Hungary flood 96:135
- Lachérade, S.: See Bousquet, L.
- Laffly, D.: See Moreau, M.
- Lamar, W.R., McGraw, J.B. and Warner, T.A.: Multitemporal censusing of a population of eastern hemlock (*Tsuga canadensis* L.) from remotely sensed imagery using an automated segmentation and reconciliation procedure 94:133
- Lampkin, D.: See Nagler, P.L.
- Laris, P.S.: Spatiotemporal problems with detecting and mapping mosaic fire regimes with coarse-resolution satellite data in savanna environments 99:412
- Lass, L.W.: See Glenn, N.F.
- Lass, L.W.: See Mundt, J.T.
- Latifovic, R.: See Fraser, R.H.
- Latifovic, R.: See Olthof, I.
- Lauenroth, W.K.: See Bradford, J.B.
- Launeau, P.: See Combe, J.-P.
- Laurent, E.J., Shi, H., Gatzolis, D., LeBouton, J.P., Walters, M.B. and Liu, J.: Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns 97:249
- Laurila, T.: See Louis, J.
- Lay, M.: See Li, L.
- Lázaro, C., Fernandes, M.J., Santos, A.M.P. and Oliveira, P.: Seasonal and interannual variability of surface circulation in the Cape Verde region from 8 years of merged T/P and ERS-2 altimeter data 98:45
- Le Hégarat-Masclé, S., Otlé, C. and Guérin, C.: Land cover change detection at coarse spatial scales based on iterative estimation and previous state information 95:464
- Le Toan, T.: See Delbart, N.
- Le Toan, T.: See Grippa, M.
- Leavitt, B.: See Dall'Olmo, G.
- Leblanc, S.G.: See Chen, J.M.
- Leblanc, S.G.: See Fernandes, R.
- LeBouton, J.P.: See Laurent, E.J.
- Leckie, D.G., Gougeon, F.A., Tinis, S., Nelson, T., Burnett, C.N. and Paradine, D.: Automated tree recognition in old growth conifer stands with high resolution digital imagery 94:311
- Leconte, R.: See Temimi, M.
- Lee, E.M.: See Kargel, J.S.
- Lee, R.-Y.: See Kastens, J.H.
- Lefsky, M.A., Hudak, A.T., Cohen, W.B. and Acker, S.A.: Geographic variability in lidar predictions of forest stand structure in the Pacific Northwest 95:532
- Lefsky, M.A., Hudak, A.T., Cohen, W.B. and Acker, S.A.: Patterns of covariance between forest stand and canopy structure in the Pacific Northwest 95:517
- Lefsky, M.A., Turner, D.P., Guzy, M. and Cohen, W.B.: Combining lidar estimates of aboveground biomass and Landsat estimates of stand age for spatially extensive validation of modeled forest productivity 95:549
- Legleiter, C.J. and Roberts, D.A.: Effects of channel morphology and sensor spatial resolution on image-derived depth estimates 95:231
- Legrésy, B., Papa, F., Remy, F., Vinay, G., Van den Bosch, M. and Zanife, O.-Z.: ENVISAT radar altimeter measurements over continental surfaces and ice caps using the ICE-2 retracking algorithm 95:150
- Legrésy, B.: See Berthier, E.
- León, J.G.: See Frappart, F.
- Levin, I., Levina, E., Gilbert, G. and Stewart, S.: Role of sensor noise in hyperspectral remote sensing of natural waters: Application to retrieval of phytoplankton pigments 95:264
- Levina, E.: See Levin, I.
- Lewis, P.E.: See Roy, D.P.
- Lhermitte, J.: See Delbart, N.
- Li, C.: See Xiao, X.
- Li, F.: See French, A.N.
- Li, L., Ustin, S.L. and Lay, M.: Application of AVIRIS data in detection of oil-induced vegetation stress and cover change at Jornada, New Mexico 94:1
- Li, Q.: See Liu, J.
- Liang, S.: See Fang, H.
- Liang, S.: See Stroeve, J.
- Linder, E.: See Zhang, Q.
- Liu, J., Drummond, J.R., Li, Q., Gille, J.C. and Ziskin, D.C.: Satellite mapping of CO emission from forest fires in Northwest America using MOPITT measurements 95:502
- Liu, J., Liu, M., Tian, H., Zhuang, D., Zhang, Z., Zhang, W., Tang, X. and Deng, X.: Spatial and temporal patterns of China's cropland during 1990-2000: An analysis based on Landsat TM data 98:442
- Liu, J.: See Laurent, E.J.
- Liu, J.: See Xiao, X.
- Liu, M.: See Liu, J.
- Liu, W. and Wu, E.Y.: Comparison of non-linear mixture models: sub-pixel classification 94:145
- Liu, W.T.: See Evans, D.L.
- Lobo, A.: See Hagolle, O.
- Loboda, T.: See Sukhinin, A.I.
- Loeb, N.: See Diner, D.J.
- Loeffelholz, B.C.: See Yuan, F.
- Loheide II, S.P. and Gorelick, S.M.: A local-scale, high-resolution evapotranspiration mapping algorithm (ETMA) with hydroecological applications at riparian meadow restoration sites 98:182
- López-Lozano, R.: See Zarco-Tejada, P.J.
- Lopez-Sanchez, J.M.: See Tomás, R.
- Los, S.O., North, P.R.J., Grey, W.M.F. and Barnsley, M.J.: A method to convert AVHRR Normalized Difference Vegetation Index time series to a standard viewing and illumination geometry 99:400
- Louis, J., Ounis, A., Ducruet, J.-M., Evain, S., Laurila, T., Thum, T., Aurela, M., Wingsle, G., Alonso, L., Pedros, R. and Moya, I.: Remote sensing of sunlight-induced chlorophyll fluorescence and reflectance of Scots pine in the boreal forest during spring recovery 96:37
- Loyer, S.: See Gohin, F.
- Lucht, W.: See Hese, S.
- Luis, A.J. and Pandey, P.C.: Characteristics of atmospheric divergence and convergence in the Indian Ocean inferred from scatterometer winds 97:231
- Lunven, M.: See Gohin, F.
- Lusch, D.P.: See Becker, B.L.
- Lyon, P.E.: See Hoge, F.E.
- Machida, S.: See Urai, M.
- Mackay, D.S.: See Ahl, D.E.
- Maersperger, T.K.: See Berterretche, M.
- Maisongrande, P.: See Hagolle, O.
- Malik, R.N.: See Salovaara, K.J.
- Mallorquí, J.J.: See Tomás, R.
- Marcus, A.: See Goovaerts, P.
- Margolis, H.A.: See Drolet, G.G.
- Maritorena, S. and Siegel, D.A.: Consistent merging of satellite ocean color data sets using a bio-optical model 94:429
- Markus, H.J.: See Metsämäki, S.J.
- Markus, T.: See Bindenschadler, R.
- Márquez, Y.: See Tomás, R.
- Mars, J.C.: See Rowan, L.C.
- Martin, M.: See Pontius, J.
- Martin, M.P.: See Chuvieco, E.
- Martin, P.: See Zarco-Tejada, P.J.
- Martin, R.E.: See Asner, G.P.

- Martinez, J.-M.: *See* Frappart, F.
 Martínez, M.: *See* Tomás, R.
 Martinko, E.A.: *See* Kastens, J.H.
 Martiny, N., Santer, R. and Smolskaia, I.: Vicarious calibration of MERIS over dark waters in the near infrared 94:475
 Martonchik, J.V.: *See* Diner, D.J.
 Marullo, S.: *See* Buongiorno Nardelli, B.
 Matthews, J.: Stereo observation of lakes and coastal zones using ASTER imagery 99:16
 Mauger, A.J.: *See* Hewson, R.D.
 Mazzega, P.: *See* Jarlan, L.
 McCabe, M.F.: *See* French, A.N.
 McCandless, W.: *See* Evans, D.L.
 McClain, C.R.: *See* Garcia, C.A.E.
 McGaughey, R.J.: *See* Andersen, H.-E.
 McGraw, J.B.: *See* Lamar, W.R.
 McVicar, T.R.: *See* Van Niel, T.G.
 Méléder, V.: *See* Combe, J.-P.
 Mélin, F., Berthon, J.-F. and Zibordi, G.: Assessment of apparent and inherent optical properties derived from SeaWiFS with field data 97:540
 Menard, Y.: *See* Evans, D.L.
 Menges, C.H.: *See* Chen, J.M.
 Metsämäki, S.J., Anttila, S.T., Markus, H.J. and Vepsäläinen, J.M.: A feasible method for fractional snow cover mapping in boreal zone based on a reflectance model 95:77
 Metternicht, G., Huml, L. and Gogu, R.: Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments 98:284
 Middleton, E.M.: *See* Drolet, G.G.
 Miller, J.R.: *See* Zarco-Tejada, P.J.
 Miskiv, S.I.: *See* Sukhinin, A.I.
 Mitchelson-Jacob, E.G.: *See* Binding, C.E.
 Mizuhiko, S.: *See* Hewson, R.D.
 Mognard, N.: *See* Grippa, M.
 Montes-Hugo, M.A., Carder, K., Foy, R.J., Cannizzaro, J., Brown, E. and Pegau, S.: Estimating phytoplankton biomass in coastal waters of Alaska using airborne remote sensing 98:481
 Moody, A.: *See* Xiao, J.
 Moore III, B.: *See* Cardoso, M.F.
 Moore III, B.: *See* Xiao, X.
 Moore III, B.: *See* Zhang, Q.
 Moore, R.: *See* Evans, D.L.
 Moore, T.S.: *See* Feng, H.
 Moreau, M., Laffly, D., Joly, D. and Brossard, T.: Analysis of plant colonization on an arctic moraine since the end of the Little Ice Age using remotely sensed data and a Bayesian approach 99:244
 Mougin, E.: *See* Jarlan, L.
 Mougin, E.: *See* Zine, S.
 Mouginiis-Mark, P.J. and Garbeil, H.: Quality of TOPSAR topographic data for volcanology studies at Kilauea Volcano, Hawaii: An assessment using airborne lidar data 96:149
 Moya, I.: *See* Bousquet, L.
 Moya, I.: *See* Louis, J.
 Mulas, J.: *See* Tomás, R.
 Muller, J.-P.: *See* Diner, D.J.
 Muller-Karger, F.E.: *See* Hu, C.
 Mundt, J.T., Glenn, N.F., Weber, K.T., Prather, T.S., Lass, L.W. and Pettingill, J.: Discrimination of hoary cress and determination of its detection limits via hyperspectral image processing and accuracy assessment techniques 96:509
 Mundt, J.T.: *See* Glenn, N.F.
 Murphy, R.J.: *See* Pinkerton, M.H.
 Mushkin, A. and Gillespie, A.R.: Estimating sub-pixel surface roughness using remotely sensed stereoscopic data 99:75
 Mushkin, A., Balick, L.K. and Gillespie, A.R.: Extending surface temperature and emissivity retrieval to the mid-infrared (3–5 μm) using the Multispectral Thermal Imager (MTI) 98:141
 Mustard, J.F.: *See* Bradley, B.A.
 Muukkonen, P. and Heiskanen, J.: Estimating biomass for boreal forests using ASTER satellite data combined with standwise forest inventory data 99:434
 Nagler, P.L., Cleverly, J., Glenn, E., Lampkin, D., Huete, A. and Wan, Z.: Predicting riparian evapotranspiration from MODIS vegetation indices and meteorological data 94:17
 Nagler, P.L., Scott, R.L., Westenberg, C., Cleverly, J.R., Glenn, E.P. and Huete, A.R.: Evapotranspiration on western U.S. rivers estimated using the Enhanced Vegetation Index from MODIS and data from eddy covariance and Bowen ratio flux towers 97:337
 Näränen, J.: *See* Peltoniemi, J.I.
 Næsset, E. and Gobakken, T.: Estimating forest growth using canopy metrics derived from airborne laser scanner data 96:453
 Næsset, E., Bollandsås, O.M. and Gobakken, T.: Comparing regression methods in estimation of biophysical properties of forest stands from two different inventories using laser scanner data 94:541
 Næsset, E.: Assessing sensor effects and effects of leaf-off and leaf-on canopy conditions on biophysical stand properties derived from small-footprint airborne laser data 98:356
 Neeff, T., Biging, G.S., Dutra, L.V., Freitas, C.C. and dos Santos, J.R.: Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height 97:484
 Neeff, T., de Alencastro Graça, P.M., Dutra, L.V. and da Costa Freitas, C.: Carbon budget estimation in Central Amazonia: Successional forest modeling from remote sensing data 94:508
 Nelson, D.L.: *See* Diner, D.J.
 Nelson, R., Keller, C. and Ratnaswamy, M.: Locating and estimating the extent of Delmarva fox squirrel habitat using an airborne LiDAR profiler 96:292
 Nelson, T.: *See* Leckie, D.G.
 Nemani, R.R.: *See* Zhao, M.
 Netzband, M.: *See* Stefanov, W.L.
 Neumann, K.: *See* Hese, S.
 Nezlin, N.P. and Stein, E.D.: Spatial and temporal patterns of remotely-sensed and field-measured rainfall in southern California 96:228
 Nezlin, N.P., DiGiacomo, P.M., Stein, E.D. and Ackerman, D.: Stormwater runoff plumes observed by SeaWiFS radiometer in the Southern California Bight 98:494
 Niclòs, R., Valor, E., Caselles, V., Coll, C. and Sánchez, J.M.: In situ angular measurements of thermal infrared sea surface emissivity—Validation of models 94:83
 Niclòs, R.: *See* Coll, C.
 Nilsen, L.: *See* Beck, P.S.A.
 Ninomiya, Y., Fu, B. and Cudahy, T.J.: Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared "radiance-at-sensor" data 99:127
 Njoku, E.: *See* Evans, D.L.
 Nobileau, D. and Antoine, D.: Detection of blue-absorbing aerosols using near infrared and visible (ocean color) remote sensing observations 95:368
 Nobre, C.A.: *See* Cardoso, M.F.
 Nolin, A.: *See* Stroeve, J.
 Nolin, A.W.: *See* Diner, D.J.
 Noor, A.M.: *See* Tatem, A.J.
 Norman, J.M.: *See* Ahl, D.E.
 North, P.R.J.: *See* Los, S.O.
 O'Hirok, W.: *See* Wyser, K.
 Ohno, H.: *See* Sakamoto, T.
 Okin, G.S.: *See* Ballantine, J.-A.C.
 Okumura, T.: *See* Shimada, T.
 Olesen, F.-S.: *See* Dash, P.
 Oliso, A.: *See* Gómez, M.
 Oliveira, P.: *See* Lázaro, C.
 Oliver, M.D.: *See* Pinkerton, M.H.

- Olsen, R.C.: See Tso, B.
- Olthof, I., Butson, C. and Fraser, R.: Signature extension through space for northern landcover classification: A comparison of radiometric correction methods 95:290
- Olthof, I., Pouliot, D., Fernandes, R. and Latifovic, R.: Landsat-7 ETM+ radiometric normalization comparison for northern mapping applications 95:388
- Or, D.: See Serbin, G.
- Otieno, D.: See Wang, Q.
- Ottlé, C.: See Le Hégarat-Masclé, S.
- Ounis, A.: See Louis, J.
- Pandey, P.C.: See Luis, A.J.
- Papa, F.: See Legresy, B.
- Paradine, D.: See Leckie, D.G.
- Pasqualini, V., Pergent-Martini, C., Pergent, G., Agreil, M., Skoufas, G., Sourbes, L. and Tsirika, A.: Use of SPOT 5 for mapping seagrasses: An application to *Posidonia oceanica* 94:39
- Paul, F.: See Kargel, J.S.
- Pavlichenko, E.A.: See Sukhinin, A.I.
- Peddle, D.R.: See Théau, J.
- Pedros, R.: See Louis, J.
- Pegau, S.: See Montes-Hugo, M.A.
- Pekkarinen, A.: See Tuominen, S.
- Peltoniemi, J.I., Kaasalainen, S., Näränen, J., Rautiainen, M., Stenberg, P., Smolander, H., Smolander, S. and Voipio, P.: BRDF measurement of understory vegetation in pine forests: dwarf shrubs, lichen, and moss 94:343
- Pereira, J.M.C.: See Silva, J.M.N.
- Pergent, G.: See Pasqualini, V.
- Pergent-Martini, C.: See Pasqualini, V.
- Pergola, N.: See Lacava, T.
- Pergola, N.: See Tramutoli, V.
- Peterson, B.: See Hyde, P.
- Pettingill, J.: See Glenn, N.F.
- Pettingill, J.: See Mundt, J.T.
- Picard, G.: See Delbart, N.
- Pieri, D. and Abrams, M.: ASTER observations of thermal anomalies preceding the April 2003 eruption of Chikurachki volcano, Kurile Islands, Russia 99:84
- Pierson, D.C.: See Kutser, T.
- Pietrapertosa, C.: See Tramutoli, V.
- Pietroniro, A.: See Töyrä, J.
- Pilegaard, K.: See Wang, Q.
- Pinkerton, M.H., Richardson, K.M., Boyd, P.W., Gall, M.P., Zeldis, J., Oliver, M.D. and Murphy, R.J.: Intercomparison of ocean colour band-ratio algorithms for chlorophyll concentration in the Subtropical Front east of New Zealand 97:382
- Pinter Jr., P.J.: See Fitzgerald, G.J.
- Pinty, B.: See Diner, D.J.
- Poivlé, H.: See Koetz, B.
- Pontius, J., Hallett, R. and Martin, M.: Using AVIRIS to assess hemlock abundance and early decline in the Catskills, New York 97:163
- Pouliot, D.: See Olthof, I.
- Powell, H.: See Foster, J.L.
- Pozdnyakov, D., Shuchman, R., Korosov, A. and Hatt, C.: Operational algorithm for the retrieval of water quality in the Great Lakes 97:352
- Pozzi, F.: See Small, C.
- Prather, T.S.: See Glenn, N.F.
- Prather, T.S.: See Mundt, J.T.
- Prentiss, D.E.: See Ballantine, J.-A.C.
- Price, K.P.: See Kastens, J.H.
- Prueger, J.: See Doraiswamy, P.C.
- Prueger, J.: See French, A.N.
- Puliafito, C.M. and Puliafito, S.E.: Intercomparison of ground-based microwave remote sensing measurements of stratospheric ozone over the Mendoza region, Argentina with HALOE data 94:61
- Puliafito, S.E.: See Puliafito, C.M.
- Purkis, S.J.: See Riegl, B.M.
- Pushnik, J.C.: See Dobrowski, S.Z.
- Qi, J.: See Becker, B.L.
- Ratnaswamy, M.: See Nelson, R.
- Rau, F.: See Kargel, J.S.
- Raup, B.: See Kargel, J.S.
- Rauste, Y.: Multi-temporal JERS SAR data in boreal forest biomass mapping 97:263
- Rautiainen, M. and Stenberg, P.: Application of photon recollision probability in coniferous canopy reflectance simulations 96:98
- Rautiainen, M.: See Peltoniemi, J.I.
- Rautiainen, M.: Retrieval of leaf area index for a coniferous forest by inverting a forest reflectance model 99:295
- Reed, B.: See Gallo, K.
- Reed, B.: See Giri, C.
- Reich, R.: See White, J.C.
- Reichstein, M.: See Wang, Q.
- Reinart, A.: See Kutser, T.
- Remy, F.: See Legresy, B.
- Rémy, F.: See Berthier, E.
- Reutebuch, S.E.: See Andersen, H.-E.
- Richardson, K.M.: See Pinkerton, M.H.
- Riedel, T.: See Hese, S.
- Riegl, B.M. and Purkis, S.J.: Detection of shallow subtidal corals from IKONOS satellite and QTC View (50, 200 kHz) single-beam sonar data (Arabian Gulf, Dubai, UAE) 95:96
- Rivard, B.: See Wang, L.
- Rivard, B.: See Zhang, J.
- Rivas, R.: See Coll, C.
- Rizzetto, F.: See Teatini, P.
- Roberts, D.A.: See Ballantine, J.-A.C.
- Roberts, D.A.: See Clark, M.L.
- Roberts, D.A.: See Legleiter, C.J.
- Roberts, D.A.: See Souza Jr., C.M.
- Röder, A., Kuemmerle, T. and Hill, J.: Extension of retrospective datasets using multiple sensors. An approach to radiometric intercalibration of Landsat TM and MSS data 95:195
- Romano, F.: See Lacava, T.
- Romasko, V.I.: See Sukhinin, A.I.
- Rowan, L.C., Mars, J.C. and Simpson, C.J.: Lithologic mapping of the Mordor, NT, Australia ultramafic complex by using the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) 99:105
- Rowan, L.C.: See Hook, S.J.
- Roy, D.P., Jin, Y., Lewis, P.E. and Justice, C.O.: Prototyping a global algorithm for systematic fire-affected area mapping using MODIS time series data 97:137
- Rudant, J.-P.: See Zine, S.
- Rundquist, D.C.: See Dall'Omo, G.
- Running, S.W.: See Zhao, M.
- Rutherford, J.F.: See Bergen, K.M.
- Sá, A.C.L.: See Silva, J.M.N.
- Sader, S.A.: See Jin, S.
- Sakaida, F.: See Shimada, T.
- Sakamoto, T., Yokozawa, M., Toritani, H., Shibayama, M., Ishitsuka, N. and Ohno, H.: A crop phenology detection method using time-series MODIS data 96:366
- Salas, W.: See Xiao, X.
- Saleska, S.: See Xiao, X.
- Salovaara, K.J., Thessler, S., Malik, R.N. and Tuomisto, H.: Classification of Amazonian primary rain forest vegetation using Landsat ETM+ satellite imagery 97:39
- Sánchez, J.M.: See Coll, C.

- Sánchez, J.M.: See Niclòs, R.
 Sánchez-Azofeifa, A.: See Zhang, J.
 Sanchez-Azofeifa, G.A.: See Van Laake, P.E.
 Santer, R.: See Martiny, N.
 Santoleri, R.: See Buongiorno Nardelli, B.
 Santos, A.M.P.: See Lázaro, C.
 Sawaya, K.E.: See Yuan, F.
 Schaaf, C.: See Stroeve, J.
 Schaaf, C.B.: See Diner, D.J.
 Schladow, S.G.: See Steissberg, T.E.
 Schmidt, A.: See Simpson, J.J.
 Schmulius, C.: See Hese, S.
 Schoenauer, M.: See Jarlan, L.
 Schott, B.: See Jordan, G.
 Schlerf, M., Atzberger, C. and Hill, J.: Remote sensing of forest biophysical variables using HyMap imaging spectrometer data 95:177
 Schröter, K.: See Hese, S.
 Schull, M.: See Thenkabail, P.S.
 Schwarz, M. and Zimmermann, N.E.: A new GLM-based method for mapping tree cover continuous fields using regional MODIS reflectance data 95:428
 Scott, R.L.: See Nagler, P.L.
 Sedano, F., Gong, P. and Ferrão, M.: Land cover assessment with MODIS imagery in southern African Miombo ecosystems 98:429
 Seiz, G.: See Diner, D.J.
 Şensoy, A.: See Tekeli, A.E.
 Serbin, G. and Or, D.: Ground-penetrating radar measurement of crop and surface water content dynamics 96:119
 Serio, C.: See Wulfmeyer, V.
 Seyler, F.: See Frappart, F.
 Sharp, M.: See Wang, L.
 Shi, H.: See Laurent, E.J.
 Shibayama, M.: See Sakamoto, T.
 Shimada, T., Sakaida, F., Kawamura, H. and Okumura, T.: Application of an edge detection method to satellite images for distinguishing sea surface temperature fronts near the Japanese coast 98:21
 Shimazaki, H.: See Chen, J.
 Shoshany, M.: See Cohen, Y.
 Shroder, J.F.: See Kargel, J.S.
 Shuchman, R.: See Pozdnyakov, D.
 Shuman, C.: See Bindschadler, R.
 Siegel, D.A.: See Maritorena, S.
 Silva, J.M.N., Sá, A.C.L. and Pereira, J.M.C.: Comparison of burned area estimates derived from SPOT-VEGETATION and Landsat ETM+ data in Africa: Influence of spatial pattern and vegetation type 96:188
 Silva, T.A.M. and Bigg, G.R.: Computer-based identification and tracking of Antarctic icebergs in SAR images 94:287
 Silverio, W. and Jaquet, J.-M.: Glacial cover mapping (1987-1996) of the Cordillera Blanca (Peru) using satellite imagery 95:342
 Simpson, C.J.: See Rowan, L.C.
 Simpson, J.J., Tsou, Y.L.(Ben), Schmidt, A. and Harris, A.: Analysis of along track scanning radiometer-2 (ATSR-2) data for clouds, glint and sea surface temperature using neural networks 98:152
 Sinclair, T.R.: See Doraiswamy, P.C.
 Singh, P.: See Gupta, R.P.
 Skoufas, G.: See Pasqualini, V.
 Slinkina, O.A.: See Sukhinin, A.I.
 Small, C., Pozzi, F. and Elvidge, C.D.: Spatial analysis of global urban extent from DMSP-OLS night lights 96:277
 Smith, A.M.S., Wooster, M.J., Drake, N.A., Dipotso, F.M., Falkowski, M.J. and Hudak, A.T.: Testing the potential of multi-spectral remote sensing for retrospectively estimating fire severity in African Savannas 97:92
 Smith, M.D.: See Carter, G.A.
 Smolander, H.: See Peltoniemi, J.I.
 Smolander, S. and Stenberg, P.: Simple parameterizations of the radiation budget of uniform broadleaved and coniferous canopies 94:355
 Smolander, S.: See Peltoniemi, J.I.
 Smolskaia, I.: See Martiny, N.
 Sobek, S.: See Kutser, T.
 Sobrino, J.A., Jiménez-Muñoz, J.C. and Verhoef, W.: Canopy directional emissivity: Comparison between models 99:304
 Sobrino, J.A.: See Gómez, M.
 Soja, A.J.: See Sukhinin, A.I.
 Solberg, A.H.S.: See Brekke, C.
 Soltesz, D.: See Kargel, J.S.
 Song, C.: Spectral mixture analysis for subpixel vegetation fractions in the urban environment: How to incorporate endmember variability? 95:248
 Sorbel, B.: See Epting, J.
 Sotin, C.: See Combe, J.-P.
 Sourbes, L.: See Pasqualini, V.
 Souza Jr., C.M., Roberts, D.A. and Cochrane, M.A.: Combining spectral and spatial information to map canopy damage from selective logging and forest fires 98:329
 Stainforth, D.: See Kargel, J.S.
 Stearns, L.: See Kargel, J.S.
 Steele, B.M.: Maximum posterior probability estimators of map accuracy 99:254
 Stefanov, W.L. and Netzband, M.: Assessment of ASTER land cover and MODIS NDVI data at multiple scales for ecological characterization of an arid urban center 99:31
 Stehman, S.V.: Comparing estimators of gross change derived from complete coverage mapping versus statistical sampling of remotely sensed data 96:466
 Stein, A.: See Debba, P.
 Stein, A.: See Tapia, R.
 Stein, E.D.: See Nezhlin, N.P.
 Steissberg, T.E., Hook, S.J. and Schladow, S.G.: Characterizing partial upwellings and surface circulation at Lake Tahoe, California-Nevada, USA with thermal infrared images 99:2
 Stenberg, P.: See Peltoniemi, J.I.
 Stenberg, P.: See Rautiainen, M.
 Stenberg, P.: See Smolander, S.
 Stern, A.: See Doraiswamy, P.C.
 Stewart, S.: See Levin, I.
 Stien, A.: See Beck, P.S.A.
 Stimson, H.C., Breshears, D.D., Ustin, S.L. and Kefauver, S.C.: Spectral sensing of foliar water conditions in two co-occurring conifer species: *Pinus edulis* and *Juniperus monosperma* 96:108
 Stimson, H.C.: See Greenberg, J.A.
 Stock, J.M.: See Hook, S.J.
 Stroeve, J., Box, J.E., Gao, F., Liang, S., Nolin, A. and Schaaf, C.: Accuracy assessment of the MODIS 16-day albedo product for snow: comparisons with Greenland in situ measurements 94:46
 Stroeve, J.: See Diner, D.J.
 Strozzi, T.: See Teatini, P.
 Su, H.: See French, A.N.
 Su, Z.: See French, A.N.
 Sukhinin, A.I., French, N.H.F., Kasichke, E.S., Hewson, J.H., Soja, A.J., Csizsar, I.A., Hyer, E.J., Loboda, T., Conard, S.G., Romasko, V.I., Pavlichenko, E.A., Miskiv, S.I. and Slinkina, O.A.: Corrigendum to "AVHRR-based mapping of fires in Russia: New products for fire management and carbon cycle studies" [Remote Sensing of Environment, 93, 546-564] 94:428
 Sun, C.: See Foster, J.L.
 Swarzenski, P.: See Hu, C.
 Takahashi, W. and Kawamura, H.: Detection method of the Kuroshio front using the satellite-derived chlorophyll-a images 97:83
 Tamura, M.: See Chen, J.
 Tanaka, A.: See Kishino, M.
 Tang, J., Xue, Y., Yu, T. and Guan, Y.: Aerosol optical thickness determination by exploiting the synergy of TERRA and AQUA MODIS 94:327
 Tang, X.: See Liu, J.

- Tapia, R., Stein, A. and Bijker, W.: Optimization of sampling schemes for vegetation mapping using fuzzy classification 99:425
- Taranik, J.V.: *See* Vaughan, R.G.
- Tatem, A.J., Noor, A.M. and Hay, S.I.: Assessing the accuracy of satellite derived global and national urban maps in Kenya 96:87
- Taylor, C.(Judd): *See* Hu, C.
- Tcheng, D.: *See* White, A.B.
- Teatini, P., Tosi, L., Strozzi, T., Carbognin, L., Wegmüller, U. and Rizzetto, F.: Mapping regional land displacements in the Venice coastland by an integrated monitoring system 98:403
- Tekeli, A.E., Akyürek, Z., Arda Şorman, A., Şensoy, A. and Ünal Şorman, A.: Using MODIS snow cover maps in modeling snowmelt runoff process in the eastern part of Turkey 97:216
- Temimi, M., Leconte, R., Brissette, F. and Chaouch, N.: Flood monitoring over the Mackenzie River Basin using passive microwave data 98:344
- Tenhunen, J.: *See* Wang, Q.
- Théau, J., Peddle, D.R. and Duguay, C.R.: Mapping lichen in a caribou habitat of Northern Quebec, Canada, using an enhancement-classification method and spectral mixture analysis 94:232
- Thenkabail, P.S., Schull, M. and Tural, H.: Ganges and Indus river basin land use/land cover (LULC) and irrigated area mapping using continuous streams of MODIS data 95:317
- Thessler, S.: *See* Salovaara, K.J.
- Thoma, D.P., Gupta, S.C., Bauer, M.E. and Kirchoff, C.E.: Airborne laser scanning for riverbank erosion assessment 95:493
- Thum, T.: *See* Louis, J.
- Tian, H.: *See* Liu, J.
- Timmermans, W.: *See* French, A.N.
- Tinis, S.: *See* Leckie, D.G.
- Tisot, D.A.: *See* Galvão, L.S.
- Tomás, R., Márquez, Y., Lopez-Sanchez, J.M., Delgado, J., Blanco, P., Mallorquí, J.J., Martínez, M., Herrera, G. and Mulas, J.: Mapping ground subsidence induced by aquifer overexploitation using advanced Differential SAR Interferometry: Vega Media of the Segura River (SE Spain) case study 98:269
- Tonboe, R. and Toudal, L.: Classification of new-ice in the Greenland Sea using Satellite SSM/I radiometer and SeaWinds scatterometer data and comparison with ice model 97:277
- Toritani, H.: *See* Sakamoto, T.
- Tosi, L.: *See* Teatini, P.
- Toudal, L.: *See* Tonboe, R.
- Töyrä, J. and Pietroniro, A.: Towards operational monitoring of a northern wetland using geomatics-based techniques 97:174
- Tracol, Y.: *See* Jarlan, L.
- Tramutoli, V., Cuomo, V., Filizola, C., Pergola, N. and Pietrapertosa, C.: Assessing the potential of thermal infrared satellite surveys for monitoring seismically active areas: The case of Kocaeli (İzmit) earthquake, August 17, 1999 96:409
- Tramutoli, V.: *See* Lacava, T.
- Tsirika, A.: *See* Pasqualini, V.
- Tso, B. and Olsen, R.C.: A contextual classification scheme based on MRF model with improved parameter estimation and multiscale fuzzy line process 97:127
- Tsou, Y.L.(Ben): *See* Simpson, J.J.
- Tuominen, S. and Pekkarinen, A.: Performance of different spectral and textural aerial photograph features in multi-source forest inventory 94:256
- Tuomisto, H.: *See* Salovaara, K.J.
- Turner, D.P.: *See* Lefsky, M.A.
- Tural, H.: *See* Thenkabail, P.S.
- Ueda, K.: *See* Hewson, R.D.
- Ünal Şorman, A.: *See* Tekeli, A.E.
- Urai, M. and Machida, S.: Discolored seawater detection using ASTER reflectance products: A case study of Satsuma-Iwojima, Japan 99:95
- Ustin, S.L.: *See* Dobrowski, S.Z.
- Ustin, S.L.: *See* Greenberg, J.A.
- Ustin, S.L.: *See* Li, L.
- Ustin, S.L.: *See* Stimson, H.C.
- Vadon, H.: *See* Berthier, E.
- Valor, E.: *See* Coll, C.
- Valor, E.: *See* Niclòs, R.
- Van den Bosch, M.: *See* Legresy, B.
- Van der Meer, F.D.: *See* Debba, P.
- Van der Wal, D., Herman, P.M.J. and Wielemaker-van den Dool, A.: Characterisation of surface roughness and sediment texture of intertidal flats using ERS SAR imagery 98:96
- Van Laake, P.E. and Sanchez-Azofeifa, G.A.: Mapping PAR using MODIS atmosphere products 94:554
- Van Niel, T.G., McVicar, T.R. and Datt, B.: On the relationship between training sample size and data dimensionality: Monte Carlo analysis of broadband multi-temporal classification 98:468
- Van Ruitenbeek, F.J.A.: *See* Debba, P.
- Vanhalle, L.: *See* Blaes, X.
- Varshney, P.K.: *See* Kasetkasem, T.
- Varshney, P.K.: *See* Xu, M.
- Vaughan, R.G., Hook, S.J., Calvin, W.M. and Taranik, J.V.: Surface mineral mapping at Steamboat Springs, Nevada, USA, with multi-wavelength thermal infrared images 99:140
- Ventura, G.: *See* Chuvieco, E.
- Venturini, V.: *See* Bisht, G.
- Vepsäläinen, J.M.: *See* Metsämäki, S.J.
- Verbyla, D.: *See* Epting, J.
- Verhoef, W.: *See* Sobrino, J.A.
- Veroustraete, F.: *See* Verstraeten, W.W.
- Verstraeten, W.W., Veroustraete, F. and Feyen, J.: Estimating evapotranspiration of European forests from NOAA-imagery at satellite overpass time: Towards an operational processing chain for integrated optical and thermal sensor data products 96:256
- Vierling, L.: *See* Chen, X.
- Vinay, G.: *See* Legresy, B.
- Vincent, C.: *See* Berthier, E.
- Vitousek, P.M.: *See* Asner, G.P.
- Voipio, P.: *See* Peltoniemi, J.I.
- Walker, A.: *See* Derksen, C.
- Walker, J.P.: *See* Dong, J.
- Walker, J.P.: *See* Foster, J.L.
- Walker, W.: *See* Hyde, P.
- Walters, M.B.: *See* Laurent, E.J.
- Wan, Z.: *See* Nagler, P.L.
- Wang, D.: *See* Wu, J.
- Wang, L., Sharp, M., Brown, R., Derksen, C. and Rivard, B.: Evaluation of spring snow covered area depletion in the Canadian Arctic from NOAA snow charts 95:453
- Wang, L.: *See* Chen, J.
- Wang, Q., Adiku, S., Tenhunen, J. and Granier, A.: On the relationship of NDVI with leaf area index in a deciduous forest site 94:244
- Wang, Q., Tenhunen, J., Dinh, N.Q., Reichstein, M., Otieno, D., Granier, A. and Pilegarrrd, K.: Evaluation of seasonal variation of MODIS derived leaf area index at two European deciduous broadleaf forest sites 96:475
- Warner, A.S.: *See* Asner, G.P.
- Warner, T.A.: *See* Lamar, W.R.
- Watanachaturaporn, P.: *See* Xu, M.
- Weber, K.T.: *See* Glenn, N.F.
- Weber, K.T.: *See* Mundt, J.T.
- Wegmüller, U.: *See* Teatini, P.
- Werdell, P.J. and Bailey, S.W.: An improved in-situ bio-optical data set for ocean color algorithm development and satellite data product validation 98:122
- Wessels, R.: *See* Kargel, J.S.
- Westenburger, C.: *See* Nagler, P.L.
- Wheate, R.D.: *See* White, J.C.

- White, A.B., Kumar, P. and Tchong, D.: A data mining approach for understanding topographic control on climate-induced inter-annual vegetation variability over the United States 98:1
- White, J.C., Wulder, M.A., Brooks, D., Reich, R. and Wheate, R.D.: Detection of red attack stage mountain pine beetle infestation with high spatial resolution satellite imagery 96:340
- Whittaker, R.J.: *See* Ingram, J.C.
- Wielemaker-van den Dool, A.: *See* van der Wal, D.
- Wingsle, G.: *See* Louis, J.
- Wise, S.M.: *See* Fernandes da Silva, P.C.
- Wofsy, S.: *See* Xiao, X.
- Wooster, M.J.: *See* Smith, A.M.S.
- Wu, E.Y.: *See* Liu, W.
- Wu, J., Wang, D. and Bauer, M.E.: Image-based atmospheric correction of QuickBird imagery of Minnesota cropland 99:315
- Wulder, M.A.: *See* White, J.C.
- Wyser, K., O'Hirok, W. and Gautier, C.: A simple method for removing 3-D radiative effects in satellite retrievals of surface irradiance 94:335
- Wulfmeyer, V., Bauer, H., Di Girolamo, P. and Serio, C.: Comparison of active and passive water vapor remote sensing from space: An analysis based on the simulated performance of IASI and space borne differential absorption lidar 95:211
- Xian, G. and Crane, M.: Assessments of urban growth in the Tampa Bay watershed using remote sensing data 97:203
- Xiao, J. and Moody, A.: A comparison of methods for estimating fractional green vegetation cover within a desert-to-upland transition zone in central New Mexico, USA 98:237
- Xiao, X., Boles, S., Liu, J., Zhuang, D., Frolking, S., Li, C., Salas, W. and Moore III, B.: Mapping paddy rice agriculture in southern China using multi-temporal MODIS images 95:480
- Xiao, X., Zhang, Q., Saleska, S., Hutya, L., De Camargo, P., Wofsy, S., Frolking, S., Boles, S., Keller, M. and Moore III, B.: Satellite-based modeling of gross primary production in a seasonally moist tropical evergreen forest 94:105
- Xiao, X.: *See* Zhang, Q.
- Xie, H.: *See* Zhou, X.
- Xu, M., Watanachaturaporn, P., Varshney, P.K. and Arora, M.K.: Decision tree regression for soft classification of remote sensing data 97:322
- Xue, Y.: *See* Tang, J.
- Yamaguchi, Y.: *See* Gillespie, A.
- Yamaguchi, Y.: *See* Kato, S.
- Yasuoka, Y.: *See* Hazarika, M.K.
- Yeaton, C.J.: *See* Greenberg, J.A.
- Yokozawa, M.: *See* Sakamoto, T.
- Yu, T.: *See* Tang, J.
- Yuan, F., Sawaya, K.E., Loeffelholz, B.C. and Bauer, M.E.: Land cover classification and change analysis of the Twin Cities (Minnesota) Metropolitan Area by multitemporal Landsat remote sensing 98:317
- Yuan Zhang, M.: *See* Chen, J.
- Zanife, O.-Z.: *See* Legresy, B.
- Zarco-Tejada, P.J., Berjón, A., López-Lozano, R., Miller, J.R., Martín, P., Cachorro, V., González, M.R. and de Frutos, A.: Assessing vineyard condition with hyperspectral indices: Leaf and canopy reflectance simulation in a row-structured discontinuous canopy 99:271
- Zarco-Tejada, P.J.: *See* Dobrowski, S.Z.
- Zeldis, J.: *See* Pinkerton, M.H.
- Zhang, J., Rivard, B. and Sánchez-Azofeifa, A.: Spectral unmixing of normalized reflectance data for the deconvolution of lichen and rock mixtures 95:57
- Zhang, Q., Xiao, X., Braswell, B., Linder, E., Baret, F. and Moore III, B.: Estimating light absorption by chlorophyll, leaf and canopy in a deciduous broadleaf forest using MODIS data and a radiative transfer model 99:357
- Zhao, M., Heinsch, F.A., Nemani, R.R. and Running, S.W.: Improvements of the MODIS terrestrial gross and net primary production global data set 95:164
- Zhang, Q.: *See* Xiao, X.
- Zhang, W.: *See* Liu, J.
- Zhang, Z.: *See* Liu, J.
- Zhiqiang, Y.: *See* Healey, S.P.
- Zhou, X., Xie, H. and Hendrickx, J.M.H.: Statistical evaluation of remotely sensed snow-cover products with constraints from streamflow and SNOTEL measurements 94:214
- Zhu, Z.: *See* Giri, C.
- Zhuang, D.: *See* Liu, J.
- Zhuang, D.: *See* Xiao, X.
- Zibordi, G.: *See* Mélin, F.
- Zimmermann, N.E.: *See* Schwarz, M.
- Zine, S., Jarlan, L., Frison, P.-L., Mougin, E., Hiernaux, P. and Rudant, J.-P.: Land surface parameter monitoring with ERS scatterometer data over the Sahel: A comparison between agro-pastoral and pastoral areas 96:438
- Ziskin, D.C.: *See* Liu, J.
- Zribi, M., Baghdadi, N., Holah, N. and Fafin, O.: New methodology for soil surface moisture estimation and its application to ENVISAT-ASAR multi-incidence data inversion 96:485
- Zribi, M., Baghdadi, N., Holah, N., Fafin, O. and Guérin, C.: Evaluation of a rough soil surface description with ASAR-ENVISAT radar data 95:67
- Zribi, M.: *See* Holah, N.

Subject Index for Volumes 94–99

AATSR

Ground measurements for the validation of land surface temperatures derived from AATSR and MODIS data, C. Coll, V. Caselles, J.M. Galve, E. Valor, R. Niclòs, J.M. Sánchez and R. Rivas, 97:288

Aboveground biomass

Combining lidar estimates of aboveground biomass and Landsat estimates of stand age for spatially extensive validation of modeled forest productivity, M.A. Lefsky, D.P. Turner, M. Guzy and W.B. Cohen, 95:549

Absolute dynamic topography

Seasonal and interannual variability of surface circulation in the Cape Verde region from 8 years of merged T/P and ERS-2 altimeter data, C. Lázaro, M.J. Fernandes, A.M.P. Santos and P. Oliveira, 98:45

Absorbed photosynthetically active radiation

The relative importance of light-use efficiency modifications from environmental conditions and cultivation for estimation of large-scale net primary productivity, J.B. Bradford, J.A. Hicke and W.K. Lauenroth, 96:246

Absorbed radiation

The effects of aggregated land cover data on estimating NPP in northern Wisconsin, D.E. Ahl, S.T. Gower, D.S. Mackay, S.N. Burrows, J.M. Norman and G.R. Diak, 97:1

Accuracy

Use of SPOT 5 for mapping seagrasses: An application to *Posidonia oceanica*, V. Pasqualini, C. Pergent-Martini, G. Pergent, M. Agreil, G. Skoufas, L. Sourbes and A. Tsimika, 94:39

Field work and statistical analyses for enhanced interpretation of satellite fire data, M.F. Cardoso, G.C. Hurtt, B. Moore III, C.A. Nobre and H. Bain, 96:212

Maximum posterior probability estimators of map accuracy, B.M. Steele, 99:254

MODIS time-series imagery for forest disturbance detection and quantification of patch size effects, S. Jin and S.A. Sader, 99:462

Accuracy assessment

Automated tree recognition in old growth conifer stands with high resolution digital imagery, D.G. Leckie, F.A. Gougeon, S. Tinis, T. Nelson, C.N. Burnett and D. Paradine, 94:311

Hyperspectral data processing for repeat detection of small infestations of leafy spurge, N.F. Glenn, J.T. Mundt, K.T. Weber, T.S. Prather, L.W. Lass and J. Pettingill, 95:399

Assessing the accuracy of satellite derived global and national urban maps in Kenya, A.J. Tatem, A.M. Noor and S.I. Hay, 96:87

Comparison of burned area estimates derived from SPOT-VEGETATION and Landsat ETM+ data in Africa: Influence of spatial pattern and vegetation type, J.M.N. Silva, A.C.L. Sá and J.M.C. Pereira, 96:188

Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns, E.J. Laurent, H. Shi, D. Gatzliol, J.P. LeBouton, M.B. Walters and J. Liu, 97:249

ACSYS

Accuracy assessment of sea-ice concentrations from MODIS using in-situ measurements, C. Drüe and G. Heinemann, 95:139

Active remote sensing

Comparison of active and passive water vapor remote sensing from space: An analysis based on the simulated performance of IASI and space borne differential absorption lidar, V. Wulfmeyer, H. Bauer, P. Di Girolamo and C. Serio, 95:211

Active volcano

Discolored seawater detection using ASTER reflectance products: A case study of Satsuma-Iwojima, Japan, M. Urai and S. Machida, 99:95

Adriatic Sea

Assessment of apparent and inherent optical properties derived from SeaWiFS with field data, F. Mélin, J.-F. Berthon and G. Zibordi, 97:540

Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER)

Lithologic mapping of the Mordor, NT, Australia ultramafic complex by using the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER), L.C. Rowan, J.C. Mars and C.J. Simpson, 99:105

Aerial photography

Multitemporal censusing of a population of eastern hemlock (*Tsuga canadensis* L.) from remotely sensed imagery using an automated segmentation and reconciliation procedure, W.R. Lamar, J.B. McGraw and T.A. Warner, 94:133

AERONET aerosol sunphotometer data

Using angular and spectral shape similarity constraints to improve MISR aerosol and surface retrievals over land, D.J. Diner, J.V. Martonchik, R.A. Kahn, B. Pinty, N. Gobron, D.L. Nelson and B.N. Holben, 94:155

Aerosol optical thickness

Aerosol optical thickness determination by exploiting the synergy of TERRA and AQUA MODIS, J. Tang, Y. Xue, T. Yu and Y. Guan, 94:327

Aerosol retrieval

Aerosol optical thickness determination by exploiting the synergy of TERRA and AQUA MODIS, J. Tang, Y. Xue, T. Yu and Y. Guan, 94:327

Africa

Spatiotemporal problems with detecting and mapping mosaic fire regimes with coarse-resolution satellite data in savanna environments, P.S. Laris, 99:412

Agreement and disagreement

A comparative analysis of the Global Land Cover 2000 and MODIS land cover data sets, C. Giri, Z. Zhu and B. Reed, 94:123

Agriculture

Discrimination of sugarcane varieties in Southeastern Brazil with EO-1 Hyperion data, L.S. Galvão, A.R. Formaggio and D.A. Tisot, 94:523

Image-based atmospheric correction of QuickBird imagery of Minnesota cropland, J. Wu, D. Wang and M.E. Bauer, 99:315

Agriculture-crop types

Analysis of convergent evidence in an evidential reasoning knowledge-based classification, Y. Cohen and M. Shoshany, 96:518

Agro-pastoral areas

Land surface parameter monitoring with ERS scatterometer data over the Sahel: A comparison between agro-pastoral and pastoral areas, S. Zine, L. Jarlan, P.-L. Frison, E. Mougin, P. Hiernaux and J.-P. Rudant, 96:438

Airborne laser

Locating and estimating the extent of Delmarva fox squirrel habitat using an airborne LiDAR profiler, R. Nelson, C. Keller and M. Ratnaswamy, 96:292

Airborne laser scanning

Estimating forest canopy fuel parameters using LIDAR data, H.-E. Andersen, R.J. McGaughey and S.E. Reutebuch, 94:441

Airborne surveys

Estimating phytoplankton biomass in coastal waters of Alaska using airborne remote sensing, M.A. Montes-Hugo, K. Carder, R.J. Foy, J. Cannizzaro, E. Brown and S. Pegau, 98:481

Aircraft measurements

Accuracy assessment of sea-ice concentrations from MODIS using in-situ measurements, C. Drüe and G. Heinemann, 95:139

Alaska

Evaluation of remotely sensed indices for assessing burn severity in interior Alaska using Landsat TM and ETM+, J. Epting, D. Verbyla and B. Sorbel, 96:328

Satellite remote sensing classification of thaw lakes and drained thaw lake basins on the North Slope of Alaska, R.C. Frohn, K.M. Hinkel and W.R. Eisner, 97:116

Algorithm development

An improved in-situ bio-optical data set for ocean color algorithm development and satellite data product validation, P.J. Werdell and S.W. Bailey, 98:122

Algorithm validation

Evaluation of passive microwave snow water equivalent retrievals acR, the boreal forest/tundra transition of western Canada, C. Derksen, A. Walker and B. Goodison, 96:315

Algorithms

Intercomparison of ocean colour band-ratio algorithms for chlorophyll concentration in the Subtropical Front east of New Zealand, M.H. Pinkerton, K.M. Richardson, P.W. Boyd, M.P. Gall, J. Zeldis, M.D. Oliver and R.J. Murphy, 97:382

ALI

Mineral mapping on the Chilean-Bolivian Altiplano using co-orbital ALI, ASTER and Hyperion imagery: Data dimensionality issues and solutions, B.E. Hubbard and J.K. Crowley, 99:173

Allometry

Shadow allometry: Estimating tree structural parameters using hyperspatial image analysis, J.A. Greenberg, S.Z. Dobrowski and S.L. Ustin, 97:15

Altimeter

ENVISAT radar altimeter measurements over continental surfaces and ice caps using the ICE-2 retracking algorithm, B. Legresy, F. Papa, F. Remy, G. Vinay, M. van den Bosch and O.-Z. Zanife, 95:150

Altimetry

Floodplain water storage in the Negro River basin estimated from microwave remote sensing of inundation area and water levels, F. Frappart, F. Seyler, J.-M. Martinez, J.G. León and A. Cazenave, 99:387

Alunite

Optimal field sampling for targeting minerals using hyperspectral data, P. Debba, F.J.A. van Ruitenbeek, F.D. van der Meer, E.J.M. Carranza and A. Stein, 99:373

Amazon

Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height, T. Neeff, G.S. Biging, L.V. Dutra, C.C. Freitas and J.R. dos Santos, 97:484

Amazon forest

Atmospheric conditions for monitoring the long-term vegetation dynamics in the Amazon using normalized difference vegetation index, H. Kobayashi and D.G. Dye, 97:519

Optimization of sampling schemes for vegetation mapping using fuzzy classification, R. Tapia, A. Stein and W. Bijker, 99:425

Amazonia

Carbon budget estimation in Central Amazonia: Successional forest modeling from remote sensing data, T.I. Neeff, P.M. de Alencastro Graça, L.V. Dutra and C. da Costa Freitas, 94:508

Field work and statistical analyses for enhanced interpretation of satellite fire data, M.F. Cardoso, G.C. Hurtt, B. Moore III, C.A. Nobre and H. Bain, 96:212

AMSU

Improving soil wetness variations monitoring from passive microwave satellite data: The case of April 2000 Hungary flood, T. Lacava, V. Cuomo, E.V. Di Leo, N. Pergola, F. Romano and V. Tramutoli, 96:135

ANCOVA test

Influence of lake morphology and clarity on water surface temperature as measured by EOS ASTER, M.W. Becker and A. Daw, 99:288

Andes

Glacial cover mapping (1987–1996) of the Cordillera Blanca (Peru) using satellite imagery, W. Silverio and J.-M. Jaquet, 95:342

Angular index

Global mapping of foliage clumping index using multi-angular satellite data, J.M. Chen, C.H. Menges and S.G. Leblanc, 97:447

Angular measurements

In situ angular measurements of thermal infrared sea surface emissivity—Validation of models, R. Niclòs, E. Valor, V. Caselles, C. Coll and J.M. Sánchez, 94:83

Angular variations

Canopy directional emissivity: Comparison between models, J.A. Sobrino, J.C. Jiménez-Muñoz and W. Verhoef, 99:304

Anthropogenic heat discharge

Analysis of urban heat-island effect using ASTER and ETM+ Data: Separation of anthropogenic heat discharge and natural heat radiation from sensible heat flux, S. Kato and Y. Yamaguchi, 99:44

AQUA

Aerosol optical thickness determination by exploiting the synergy of TERRA and AQUA MODIS, J. Tang, Y. Xue, T. Yu and Y. Guan, 94:327

Arabian Gulf

Detection of shallow subtidal corals from IKONOS satellite and QTC View (50, 200 kHz) single-beam sonar data (Arabian Gulf; Dubai, UAE), B.M. Rieg and S.J. Purkis, 95:96

Arctic

Accuracy assessment of sea-ice concentrations from MODIS using in-situ measurements, C. Drüe and G. Heinemann, 95:139

Arctic Coastal Plain

Satellite remote sensing classification of thaw lakes and drained thaw lake basins on the North Slope of Alaska, R.C. Frohn, K.M. Hinkel and W.R. Eisner, 97:116

Artificial neural networks

Mapping tropical forest structure in southeastern Madagascar using remote sensing and artificial neural networks, J.C. Ingram, T.P. Dawson and R.J. Whittaker, 94:491

ARTMAP

Comparison of non-linear mixture models: sub-pixel classification, W. Liu and E.Y. Wu, 94:145

ART-MMAP

Comparison of non-linear mixture models: sub-pixel classification, W. Liu and E.Y. Wu, 94:145

ASAR

Evaluation of a rough soil surface description with ASAR-ENVISAT radar data, M. Zribi, N. Baghdadi, N. Holah, O. Fafin and C. Guérin, 95:67

ASAR images

Potential of ASAR/ENVISAT for the characterization of soil surface parameters over bare agricultural fields, N. Holah, N. Baghdadi, M. Zribi, A. Bruand and C. King, 96:78

ASTER

The value of multiangle measurements for retrieving structurally and radiatively consistent properties of clouds, aerosols, and surfaces, D.J. Diner, B.H. Braswell, R. Davies, N. Gobron, J. Hu, Y. Jin, R.A. Kahn, Y. Knyazikhin, N. Loeb, J.-P. Muller, A.W. Nolin, B. Pinty, C.B. Schaaf, G. Seiz and J. Stroeve, 97:495

Characterizing partial upwellings and surface circulation at Lake Tahoe, California-Nevada, USA with thermal infrared images, T.E. Steissberg, S.J. Hook and S.G. Schladow, 99:2

Stereo observation of lakes and coastal zones using ASTER imagery, J. Matthews, 99:16

Assessment of ASTER land cover and MODIS NDVI data at multiple scales for ecological characterization of an arid urban center, W.L. Stefanov and M. Netzband, 99:31

Analysis of urban heat-island effect using ASTER and ETM+ Data: Separation of anthropogenic heat discharge and natural heat radiation from sensible heat flux, S. Kato and Y. Yamaguchi, 99:44

Surface energy fluxes with the Advanced Spaceborne Thermal Emission and Reflection radiometer (ASTER) at the Iowa 2002 SMACEX site (USA), A.N. French, F. Jacob, M.C. Anderson, W.P. Kustas, W. Timmermans, A. Gieske, Z. Su, H. Su, M.F. McCabe, F. Li, J. Prueger and N. Brunsell, 99:55

Retrieval of Chlorophyll *a*, suspended solids, and colored dissolved organic matter in Tokyo Bay using ASTER data, M. Kishino, A. Tanaka and J. Ishizaka, 99:66

Estimating sub-pixel surface roughness using remotely sensed stereoscopic data, A. Mushkin and A.R. Gillespie, 99:75

ASTER observations of thermal anomalies preceding the April 2003 eruption of Chikurachki volcano, Kurile Islands, Russia, D. Pieri and M. Abrams, 99:84

Discolored seawater detection using ASTER reflectance products: A case study of Satsuma-Iwojima, Japan, M. Urai and S. Machida, 99:95

Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared "radiance-at-sensor" data, Y. Ninomiya, B. Fu and T.J. Cudahy, 99:127

Seamless geological map generation using ASTER in the Broken Hill-Curnamona province of Australia, R.D. Hewson, T.J. Cudahy, S. Mizuhiko, K. Ueda and A.J. Mauger, 99:159

Mineral mapping on the Chilean-Bolivian Altiplano using co-orbital ALI, ASTER and Hyperion imagery: Data dimensionality issues and solutions, B.E. Hubbard and J.K. Crowley, 99:173

Multispectral imaging contributions to global land ice measurements from space, J.S. Kargel, M.J. Abrams, M.P. Bishop, A. Bush, G. Hamilton, H. Jiskoot, A. Kaab, H.H. Kieffer, E.M. Lee, F. Paul, F. Rau, B. Raup, J.F. Shroder, D. Soltész, D. Stainforth, L. Stearns and R. Wessels, 99:187

ASTER kinetic temperature

Influence of lake morphology and clarity on water surface temperature as measured by EOS ASTER, M.W. Becker and A. Daw, 99:288

Atmosphere

Intercomparison of ground-based microwave remote sensing measurements of stratospheric ozone over the Mendoza region, Argentina with HALOE data, C.M. Puliafito and S.E. Puliafito, 94:61

Atmospheric convergence/divergence

Characteristics of atmospheric divergence and convergence in the Indian Ocean inferred from scatterometer winds, A.J. Luis and P.C. Pandey, 97:231

Atmospheric correction

Image-based atmospheric correction of QuickBird imagery of Minnesota cropland, J. Wu, D. Wang and M.E. Bauer, 99:315

Atmospheric correction of TOA satellite IR data

Separating surface emissivity and temperature using two-channel spectral indices and emissivity composites and comparison with a vegetation fraction method, P. Dash, F.-M. Göttsche, F.-S. Olesen and H. Fischer, 96:1

ATSR-2

Analysis of along track scanning radiometer-2 (ATSR-2) data for clouds, glint and sea surface temperature using neural networks, J.J. Simpson, Y.L. (Ben) Tsou, A. Schmidt and A. Harris, 98:152

Automatic algorithms

Oil spill detection by satellite remote sensing, C. Brekke and A.H.S. Solberg, 95:1

AVHRR

Quality assessment and improvement of temporally composited products of remotely sensed imagery by combination of VEGETATION 1 and 2 images, O. Hagolle, A. Lobo, P. Maisongrande, F. Cabot, B. Duchemin and A. De Pereyra, 94:172

On the relationship of NDVI with leaf area index in a deciduous forest site, Q. Wang, S. Adiku, J. Tenhunen and A. Granier, 94:244

Assessment of multitemporal compositing techniques of MODIS and AVHRR images for burned land mapping, E. Chuvieco, G. Ventura, M.P. Martín and I. Gómez, 94:450

Land cover change detection at coarse spatial scales based on iterative estimation and previous state information, S. Le Hégarat-Masclé, C. Ottlé and C. Guérin, 95:464

Assessing the potential of thermal infrared satellite surveys for monitoring seismically active areas: The case of Kocaeli (İzmit) earthquake, August 17, 1999, V. Tramutoli, V. Cuomo, C. Filizzola, N. Pergola and C. Pietrapertosa, 96:409

Multi-platform comparisons of MODIS and AVHRR normalized difference vegetation index data, K. Gallo, L. Ji, B. Reed, J. Eidenshink and J. Dwyer, 99:221

Image masking for crop yield forecasting using AVHRR NDVI time series imagery, J.H. Kastens, T.L. Kastens, D.L.A. Kastens, K.P. Price, E.A. Martinko and R.-Y. Lee, 99:341

AVIRIS

Ecosystem structure along bioclimatic gradients in Hawai'i from imaging spectroscopy, G.P. Asner, A.J. Elmore, R. Flint Hughes, A.S. Warner and P.M. Vitousek, 96:497

Indicators of plant species richness in AVIRIS spectra of a mesic grassland, G.A. Carter, A.K. Knapp, J.E. Anderson, G.A. Hoch and M.D. Smith, 98:304

AVIRIS data

Application of AVIRIS data in detection of oil-induced vegetation stress and cover change at Jornada, New Mexico, L. Li, S.L. Ustin and M. Lay, 94:1

Backscattering

Evaluation of a rough soil surface description with ASAR-ENVISAT radar data, M. Zribi, N. Baghdadi, N. Holah, O. Fafin and C. Guérin, 95:67

New methodology for soil surface moisture estimation and its application to ENVISAT-ASAR multi-incidence data inversion, M. Zribi, N. Baghdadi, N. Holah and O. Fafin, 96:485

Bank erosion

Airborne laser scanning for riverbank erosion assessment, D.P. Thoma, S.C. Gupta, M.E. Bauer and C.E. Kirchoff, 95:493

Basal area

Mapping tropical forest structure in southeastern Madagascar using remote sensing and artificial neural networks, J.C. Ingram, T.P. Dawson and R.J. Whittaker, 94:491

Bay of Biscay

Satellite-derived parameters for biological modelling in coastal waters: Illustration over the eastern continental shelf of the Bay of Biscay, F. Gohin, S. Loyer, M. Lunven, C. Labry, J.-M. Froidefond, D. Delmas, M. Huret and A. Herbland, 95:29

Bayes Theorem

Spectral mixture analysis for subpixel vegetation fractions in the urban environment: How to incorporate endmember variability?, C. Song, 95:248

Bayesian approach

Analysis of plant colonization on an arctic moraine since the end of the Little Ice Age using remotely sensed data and a Bayesian approach, M. Moreau, D. Laffly, D. Joly and T. Brossard, 99:244

Bhutan

Combination of SRTM3 and repeat ASTER data for deriving alpine glacier flow velocities in the Bhutan Himalaya, A. Käb, 94:463

Bias

Comparing estimators of gR. change derived from complete coverage mapping versus statistical sampling of remotely sensed data, S.V. Stehman, 96:466

Bidirectional effect normalization

Variability of biome reflectance directional signatures as seen by POLDER, C. Bacour and F.-M. Bréon, 98:80

Bidirectional reflectance distribution function

Variability of biome reflectance directional signatures as seen by POLDER, C. Bacour and F.-M. Bréon, 98:80

Biodiversity

Indicators of plant species richness in AVIRIS spectra of a mesic grassland, G.A. Carter, A.K. Knapp, J.E. Anderson, G.A. Hoch and M.D. Smith, 98:304

Biological soil crust

A new index for mapping lichen-dominated biological soil crusts in desert areas, J. Chen, M. Yuan Zhang, L. Wang, H. Shimazaki and M. Tamura, 96:165

Biomass

Global biomass mapping for an improved understanding of the CO₂ balance—the Earth observation mission Carbon-3D, S. Hese, W. Lucht, C. Schmullius, M. Barnsley, R. Dubayah, D. Knorr, K. Neumann, T. Riedel and K. Schröter, 94:94

Carbon budget estimation in Central Amazonia: Successional forest modeling from remote sensing data, T. Neeff, P.M. de Alencastro Graça, L.V. Dutra and C. da Costa Freitas, 94:508

Geographic variability in lidar predictions of forest stand structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:532

Mapping forest structure for wildlife habitat analysis using waveform lidar: Validation of montane ecosystems, P. Hyde, R. Dubayah, B. Peterson, J.B. Blair, M. Hofton, C. Hunsaker, R. Knox and W. Walker, 96:427

Shadow allometry: Estimating tree structural parameters using hyperspatial image analysis, J.A. Greenberg, S.Z. Dobrowski and S.L. Ustin, 97:15

Multi-temporal JERS SAR data in boreal forest biomass mapping, Y. Rauste, 97:263

Mapping microphytobenthos biomass by non-linear inversion of visible-infrared hyperspectral images, J.-P. Combe, P. Launeau, V. Carrère, D. Despan, V. Méléder, L. Barillé and C. Sotin, 98:371

Biomass burning

Satellite mapping of CO emission from forest fires in Northwest America using MOPITT measurements, J. Liu, J.R. Drummond, Q. Li, J.C. Gille and D.C. Ziskin, 95:502

Biomass-burning

Atmospheric conditions for monitoring the long-term vegetation dynamics in the Amazon using normalized difference vegetation index, H. Kobayashi and D.G. Dye, 97:519

Biome classification

Variability of biome reflectance directional signatures as seen by POLDER, C. Bacour and F.-M. Bréon, 98:80

Bio-optical model

Consistent merging of satellite ocean color data sets using a bio-optical model, S. Maritorena and D.A. Siegel, 94:429

Bio-optical retrieval algorithm

Operational algorithm for the retrieval of water quality in the Great Lakes, D. Pozdnyakov, R. Shuchman, A. Korosov and C. Hatt, 97:352

Bio-optics

An improved in-situ bio-optical data set for ocean color algorithm development and satellite data product validation, P.J. Werdell and S.W. Bailey, 98:122

Biophysical forest variables

Remote sensing of forest biophysical variables using HyMap imaging spectrometer data, M. Schlerf, C. Atzberger and J. Hill, 95:177

Biophysical parameters

Parametric (modified least squares) and non-parametric (Theil–Sen) linear regressions for predicting biophysical parameters in the presence of measurement errors, R. Fernandes and S.G. Leblanc, 95:303

Biosphere-atmosphere interaction

Satellite mapping of CO emission from forest fires in Northwest America using MOPITT measurements, J. Liu, J.R. Drummond, Q. Li, J.C. Gille and D.C. Ziskin, 95:502

Biosphere models

Global biomass mapping for an improved understanding of the CO₂ balance—the Earth observation mission Carbon-3D, S. Hese, W. Lucht, C. Schmullius, M. Barnsley, R. Dubayah, D. Knorr, K. Neumann, T. Riedel and K. Schröter, 94:94

Birds

Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns, E.J. Laurent, H. Shi, D. Gatziofis, J.P. LeBouton, M.B. Walters and J. Liu, 97:249

Bison grazing

Indicators of plant species richness in AVIRIS spectra of a mesic grassland, G.A. Carter, A.K. Knapp, J.E. Anderson, G.A. Hoch and M.D. Smith, 98:304

Bivariate statistical correlations

Detecting major terrain parameters relating to mass movements' occurrence using GIS, remote sensing and statistical correlations, case study Lebanon, C. Abdallah, J. Chorowicz, R. Bou Kheir and M. Khawlie, 99:448

Blob reconciliation

Multitemporal censusing of a population of eastern hemlock (*Tsuga canadensis* L.) from remotely sensed imagery using an automated segmentation and reconciliation procedure, W.R. Lamar, J.B. McGraw and T.A. Warner, 94:133

Blue-absorbing aerosols

Detection of blue-absorbing aerosols using near infrared and visible (ocean color) remote sensing observations, D. Nobileau and D. Antoine, 95:368

Boreal

Determination of phenological dates in boreal regions using normalized difference water index, N. Delbart, L. Kergoat, T. Le Toan, J. Lhermitte and G. Picard, 97:26

Boreal deciduous forest

A MODIS-derived photochemical reflectance index to detect inter-annual variations in the photosynthetic light-use efficiency of a boreal deciduous forest, G.G. Drolet, K.F. Huemmrich, F.G. Hall, E.M. Middleton, T.A. Black, A.G. Barr and H.A. Margolis, 98:212

Boreal forest

Remote sensing of sunlight-induced chlorophyll fluorescence and reflectance of Scots pine in the boreal forest during spring recovery, J. Louis, A. Ounis, J.-M. Ducruet, S. Evain, T. Laurila, T. Thum, M. Aurela, G. Wingsle, L. Alonso, R. Pedros and I. Moya, 96:37

Evaluation of passive microwave snow water equivalent retrievals acR. the boreal forest/tundra transition of western Canada, C. Derksen, A. Walker and B. Goodison, 96:315

Evaluation of remotely sensed indices for assessing burn severity in interior Alaska using Landsat TM and ETM+, J. Epting, D. Verbyla and B. Sorbel, 96:328

Multi-temporal JERS SAR data in boreal forest biomass mapping, Y. Rauste, 97:263

A simple and effective radiometric correction method to improve landscape change detection across sensors and across time, X. Chen, L. Vierling and D. Deering, 98:63

Boreal zone

A feasible method for fractional snow cover mapping in boreal zone based on a reflectance model, S.J. Metsämäki, S.T. Anttila, H.J. Markus and J.M. Vepsäläinen, 95:77

Brazilian Amazon

Combining spectral and spatial information to map canopy damage from selective logging and forest fires, C.M. Souza Jr., D.A. Roberts and M.A. Cochrane, 98:329

BRDF

Global biomass mapping for an improved understanding of the CO₂ balance—the Earth observation mission Carbon-3D, S. Hese, W. Lucht, C. Schmullius, M. Barnsley, R. Dubayah, D. Knorr, K. Neumann, T. Riedel and K. Schröter, 94:94

BRDF measurement of understory vegetation in pine forests: dwarf shrubs, lichen, and moss, J.I. Peltoniemi, S. Kaasalainen, J. Näreänen, M. Rautiainen, P. Stenberg, H. Smolander, S. Smolander and P. Voipio, 94:343

Prototyping a global algorithm for systematic fire-affected area mapping using MODIS time series data, D.P. Roy, Y. Jin, P.E. Lewis and C.O. Justice, 97:137

Global mapping of foliage clumping index using multi-angular satellite data, J.M. Chen, C.H. Menges and S.G. Leblanc, 97:447

Leaf BRDF measurements and model for specular and diffuse components differentiation, L. Bousquet, S. Lachérade, S. Jacquemoud and I. Moya, 98:201

A method to convert AVHRR Normalized Difference Vegetation Index time series to a standard viewing and illumination geometry, S.O. Los, P.R.J. North, W.M.F. Grey and M.J. Barnsley, 99:400

Broken Hill

Seamless geological map generation using ASTER in the Broken Hill-Curnamona province of Australia, R.D. Hewson, T.J. Cudahy, S. Mizuhiko, K. Ueda and A.J. Mauger, 99:159

Bromus tectorum

Identifying land cover variability distinct from land cover change: Cheatgrass in the Great Basin, B.A. Bradley and J.F. Mustard, 94:204

Burn severity

Evaluation of remotely sensed indices for assessing burn severity in interior Alaska using Landsat TM and ETM+, J. Epting, D. Verbyla and B. Sorbel, 96:328

Burn severity index

Testing the potential of multi-spectral remote sensing for retrospectively estimating fire severity in African Savannahs, A.M.S. Smith, M.J. Wooster, N.A. Drake, F.M. Dipotso, M.J. Falkowski and A.T. Hudak, 97:92

Burned area

Prototyping a global algorithm for systematic fire-affected area mapping using MODIS time series data, D.P. Roy, Y. Jin, P.E. Lewis and C.O. Justice, 97:137

Burned area mapping

Comparison of burned area estimates derived from SPOT-VEGETATION and Landsat ETM+ data in Africa: Influence of spatial pattern and vegetation type, J.M.N. Silva, A.C.L. Sá and J.M.C. Pereira, 96:188

Burned-area mapping

Spatiotemporal problems with detecting and mapping mosaic fire regimes with coarse-resolution satellite data in savanna environments, P.S. Laris, 99:412

Burned scars

Assessment of multitemporal compositing techniques of MODIS and AVHRR images for burned land mapping, E. Chuvieco, G. Ventura, M.P. Martin and I. Gómez, 94:450

Canada

A method for detecting large-scale forest cover change using coarse spatial resolution imagery, R.H. Fraser, A. Abuelgasim and R. Latifovic, 95:414

Canadian arctic

Evaluation of spring snow covered area depletion in the Canadian Arctic from NOAA snow charts, L. Wang, M. Sharp, R. Brown, C. Derksen and B. Rivard, 95:453

Canonical correlation analysis

Patterns of covariance between forest stand and canopy structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:517

Canopy

Patterns of covariance between forest stand and canopy structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:517

Mapping forest structure for wildlife habitat analysis using waveform lidar: Validation of montane ecosystems, P. Hyde, R. Dubayah, B. Peterson, J.B. Blair, M. Hofton, C. Hunsaker, R. Knox and W. Walker, 96:427

Canopy chemistry

Substrate age and precipitation effects on Hawaiian forest canopies from spaceborne imaging spectroscopy, G.P. Asner, K.M. Carlson and R.E. Martin, 98:457

Canopy conditions

Assessing sensor effects and effects of leaf-off and leaf-on canopy conditions on biophysical stand properties derived from small-footprint airborne laser data, E. Næsset, 98:356

Canopy density

Estimating forest growth using canopy metrics derived from airborne laser scanner data, E. Næsset and T. Gobakken, 96:453

Assessing sensor effects and effects of leaf-off and leaf-on canopy conditions on biophysical stand properties derived from small-footprint airborne laser data, E. Næsset, 98:356

Canopy fuels

Estimating forest canopy fuel parameters using LIDAR data, H.-E. Andersen, R.J. McGaughey and S.E. Reutebuch, 94:441

Canopy height

Estimating forest growth using canopy metrics derived from airborne laser scanner data, E. Næsset and T. Gobakken, 96:453

Assessing sensor effects and effects of leaf-off and leaf-on canopy conditions on biophysical stand properties derived from small-footprint airborne laser data, E. Næsset, 98:356

Cape Verde Archipelago

Seasonal and interannual variability of surface circulation in the Cape Verde region from 8 years of merged T/P and ERS-2 altimeter data, C. Lázaro, M.J. Fernandes, A.M.P. Santos and P. Oliveira, 98:45

Carbon

Global biomass mapping for an improved understanding of the CO₂ balance—the Earth observation mission Carbon-3D, S. Hese, W. Lucht, C. Schmullius, M. Barnsley, R. Dubayah, D. Knorr, K. Neumann, T. Riedel and K. Schröter, 94:94

Carbon budget estimation in Central Amazonia: Successional forest modeling from remote sensing data, T. Neeff, P.M. de Alencastro Graça, L.V. Dutra and C. da Costa Freitas, 94:508

Testing the potential of multi-spectral remote sensing for retrospectively estimating fire severity in African Savannahs, A.M.S. Smith, M.J. Wooster, N.A. Drake, F.M. Dipotso, M.J. Falkowski and A.T. Hudak, 97:92

Carbon balance

Detecting near-surface moisture stress in *Sphagnum* spp., A. Harris, R.G. Bryant and A.J. Baird, 97:371

Carbon budget

Carbon budget estimation in Central Amazonia: Successional forest modeling from remote sensing data, T. Neeff, P.M. de Alencastro Graça, L.V. Dutra and C. da Costa Freitas, 94:508

Carbon cycle

Estimating biomass for boreal forests using ASTER satellite data combined with standwise forest inventory data, P. Muukkonen and J. Heiskanen, 99:434

Carbon-3D

Global biomass mapping for an improved understanding of the CO₂ balance—the Earth observation mission Carbon-3D, S. Hese, W. Lucht, C. Schmullius, M. Barnsley, R. Dubayah, D. Knorr, K. Neumann, T. Riedel and K. Schröter, 94:94

Carbon monoxide

Satellite mapping of CO emission from forest fires in Northwest America using MOPITT measurements, J. Liu, J.R. Drummond, Q. Li, J.C. Gille and D.C. Ziskin, 95:502

Carbonate

Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared "radiance-at-sensor" data, Y. Ninomiya, B. Fu and T.J. Cudahy, 99:127

Caribou habitat

Mapping lichen in a caribou habitat of Northern Quebec, Canada, using an enhancement-classification method and spectral mixture analysis, J. Théau, D.R. Peddle and C.R. Duguay, 94:232

Categorical hierarchy

On the choice of spatial and categorical scale in remote sensing land cover classification, J. Ju, S. Gopal and E.D. Kolaczynski, 96:62

CDOM

Mapping lake CDOM by satellite remote sensing, T. Kutser, D.C. Pierson, K.Y. Kallio, A. Reinart and S. Sobek, 94:535

Red tide detection and tracing using MODIS fluorescence data: A regional example in SW Florida coastal waters, C. Hu, F.E. Muller-Karger, C.(Judd) Taylor, K.L. Carder, C. Kelble, E. Johns and C.A. Heil, 97:311

Retrieval of Chlorophyll *a*, suspended solids, and colored dissolved organic matter in Tokyo Bay using ASTER data, M. Kishino, A. Tanaka and J. Ishizaka, 99:66

Central Andes

Mineral mapping on the Chilean-Bolivian Altiplano using co-orbital ALI, ASTER and Hyperion imagery: Data dimensionality issues and solutions, B.E. Hubbard and J.K. Crowley, 99:173

CERES

The value of multiangle measurements for retrieving structurally and radiatively consistent properties of clouds, aerosols, and surfaces, D.J. Diner, B.H. Braswell, R. Davies, N. Gobron, J. Hu, Y. Jin, R.A. Kahn, Y. Knyazikhin, N. Loeb, J.-P. Muller, A.W. Nolin, B. Pinty, C.B. Schaaf, G. Seiz and J. Stroeve, 97:495

change detection

A method for detecting large-scale forest cover change using coarse spatial resolution imagery, R.H. Fraser, A. Abuelgasim and R. Latifovic, 95:414

Change detection

Land cover change detection at coarse spatial scales based on iterative estimation and previous state information, S. Le Hégarat-Masle, C. Ottlé and C. Guérin, 95:464

Survival analysis of a neotropical rainforest using multitemporal satellite imagery, J.A. Greenberg, S.C. Kefauver, H.C. Stimson, C.J. Yeaton and S.L. Ustin, 96:202

Prototyping a global algorithm for systematic fire-affected area mapping using MODIS time series data, D.P. Roy, Y. Jin, P.E. Lewis and C.O. Justice, 97:137

Towards operational monitoring of a northern wetland using geomatics-based techniques, J. Töyrä and A. Pietroniro, 97:174

Comparison of Tasseled Cap-based Landsat data structures for use in forest disturbance detection, S.P. Healey, W.B. Cohen, Y. Zhiqiang and O.N. Krankina, 97:301

Retrospective seagrass change detection in a shallow coastal tidal Australian lake, A.G. Dekker, V.E. Brando and J.M. Anstee, 97:415

Change detection with heterogeneous data using ecoregional stratification, statistical summaries and a land allocation algorithm, K.M. Bergen, D.G. Brown, J.F. Rutherford and E.J. Gustafson, 97:434

Land cover classification and change analysis of the Twin Cities (Minnesota) Metropolitan Area by multitemporal Landsat remote sensing, F. Yuan, K.E. Sawaya, B.C. Loeffelholz and M.E. Bauer, 98:317

A change detection model based on neighborhood correlation image analysis and decision tree classification, J. Im and J.R. Jensen, 99:326

Change vector analysis

Ganges and Indus river basin land use/land cover (LULC) and irrigated area mapping using continuous streams of MODIS data, P.S. Thenkabail, M. Shull and H. Tural, 95:317

Char

Testing the potential of multi-spectral remote sensing for retrospectively estimating fire severity in African Savannas, A.M.S. Smith, M.J. Wooster, N.A. Drake, F.M. Dipotso, M.J. Falkowski and A.T. Hudak, 97:92

Cheatgrass

Identifying land cover variability distinct from land cover change: Cheatgrass in the Great Basin, B.A. Bradley and J.F. Mustard, 94:204

Chikurachki volcano

ASTER observations of thermal anomalies preceding the April 2003 eruption of Chikurachki volcano, Kurile Islands, Russia, D. Pieri and M. Abrams, 99:84

China

Spatial and temporal patterns of China's cropland during 1990-2000: An analysis based on Landsat TM data, J. Liu, M. Liu, H. Tian, D. Zhuang, Z. Zhang, W. Zhang, X. Tang and X. Deng, 98:442

Chl-a

Detection method of the Kuroshio front using the satellite-derived chlorophyll-*a* images, W. Takahashi and H. Kawamura, 97:83

Chlorophyll

Satellite-derived parameters for biological modelling in coastal waters: Illustration over the eastern continental shelf of the Bay of Biscay, F. Gohin, S. Loyer, M. Lunven, C. Labry, J.-M. Froidefond, D. Delmas, M. Huret and A. Herbland, 95:29

Evaluation of SeaWiFS chlorophyll algorithms in the Southwestern Atlantic and Southern Oceans, C.A.E. Garcia, V.M.T. Garcia and C.R. McClain, 95:125

Assessing the potential of SeaWiFS and MODIS for estimating chlorophyll concentration in turbid productive waters using red and near-infrared bands, G. Dall'Olmo, A.A. Gitelson, D.C. Rundquist, B. Leavitt, T. Barrow and J.C. Holz, 96:176

Red tide detection and tracing using MODIS fluorescence data: A regional example in SW Florida coastal waters, C. Hu, F.E. Muller-Karger, C.(Judd) Taylor, K.L. Carder, C. Kelble, E. Johns and C.A. Heil, 97:311

Intercomparison of ocean colour band-ratio algorithms for chlorophyll concentration in the Subtropical Front east of New Zealand, M.H. P., K.M. Richardson, P.W. Boyd, M.P. Gall, J. Zeldis, M.D. Oliver and R.J. Murphy, 97:382

An improved in-situ bio-optical data set for ocean color algorithm development and satellite data product validation, P.J. Werdell and S.W. Bailey, 98:122

Chlorophyll *a*

Retrieval of Chlorophyll *a*, suspended solids, and colored dissolved organic matter in Tokyo Bay using ASTER data, M. Kishino, A. Tanaka and J. Ishizaka, 99:66

Chlorophyll *a* and *b*

Using AVIRIS to assess hemlock abundance and early decline in the Catskills, New York, J. Pontius, R. Hallett and M. Martin, 97:163

Chlorophyll *a* concentration

Estimating phytoplankton biomass in coastal waters of Alaska using airborne remote sensing, M.A. Montes-Hugo, K. Carder, R.J. Foy, J. Cannizzaro, E. Brown and S. Pegau, 98:481

Chlorophyll fluorescence

Simple reflectance indices track heat and water stress-induced changes in steady-state chlorophyll fluorescence at the canopy scale, S.Z. Dobrowski, J.C. Pushnik, P.J. Zarco-Tejada and S.L. Ustin, 97:403

CIMEL ground-based measurements

Vicarious calibration of MERIS over dark waters in the near infrared, N. Martiny, R. Santer and I. Smolskaia, 94:475

Circulation

Characterizing partial upwellings and surface circulation at Lake Tahoe, California-Nevada, USA with thermal infrared images, T.E. Steissberg, S.J. Hook and S.G. Schladow, 99:2

Clarity

Characterizing partial upwellings and surface circulation at Lake Tahoe, California-Nevada, USA with thermal infrared images, T.E. Steissberg, S.J. Hook and S.G. Schladow, 99:2

Classification

Oil spill detection by satellite remote sensing, C. Brekke and A.H.S. Solberg, 95:1

The effects of aggregated land cover data on estimating NPP in northern Wisconsin, DE. Ahl, S.T. Gower, D.S. Mackay, S.N. Burrows, J.M. Norman and G.R. Diak, 97:1

Maximum posterior probability estimators of map accuracy, B.M. Steele, 99:254

Classification accuracy

Decision tree regression for soft classification of remote sensing data, M. Xu, P. Watanachaturaporn, P.K. Varshney and M.K. Arora, 97:322

Classification efficiency

Efficiency of crop identification based on optical and SAR image time series, X. Blaes, L. Vanhulle and P. Defourny, 96:352

Classification error

Comparing estimators of gR. change derived from complete coverage mapping versus statistical sampling of remotely sensed data, S.V. Stehman, 96:466

Classification trees

Comparison of burned area estimates derived from SPOT-VEGETATION and Landsat ETM+ data in Africa: Influence of spatial pattern and vegetation type, J.M.N. Silva, A.C.L. Sá and J.M.C. Pereira, 96:188

Clear sky days

Estimation of the net radiation using MODIS (Moderate Resolution Imaging Spectroradiometer) data for clear sky days, G. Bisht, V. Venturini, S. Islam and L. Jiang, 97:52

Climate

Analysis of along track scanning radiometer-2 (ATSR-2) data for clouds, glint and sea surface temperature using neural networks, J.J. Simpson, Y.L.(Ben) Tsou, A. Schmidt and A. Harris, 98:152

Climate change

Glacial cover mapping (1987-1996) of the Cordillera Blanca (Peru) using satellite imagery, W. Silverio and J.-M. Jaquet, 95:342

Climate variability

A data mining approach for understanding topographic control on climate-induced inter-annual vegetation variability over the United States, A.B. White, P. Kumar and D. Tcheng, 98:1

Cloud detection

Analysis of along track scanning radiometer-2 (ATSR-2) data for clouds, glint and sea surface temperature using neural networks, J.J. Simpson, Y.L.(Ben) Tsou, A. Schmidt and A. Harris, 98:152

Clouds

A simple method for removing 3-D radiative effects in satellite retrievals of surface irradiance, K. Wyser, W. O'Hirok and C. Gautier, 94:335

Clumping

Application of photon recollision probability in coniferous canopy reflectance simulations, M. Rautiainen and P. Stenberg, 96:98

CO₂

Global biomass mapping for an improved understanding of the CO₂ balance—the Earth observation mission Carbon-3D, S. Hese, W. Lucht, C. Schmullius, M. Barnsley, R. Dubayah, D. Knorr, K. Neumann, T. Riedel and K. Schröter, 94:94

CO₂ flux

Remote sensing of sunlight-induced chlorophyll fluorescence and reflectance of Scots pine in the boreal forest during spring recovery, J. Louis, A. Ounis, J.-M. Ducruet, S. Evain, T. Laurila, T. Thum, M. Aurela, G. Wingsle, L. Alonso, R. Pedros and I. Moya, 96:37

CO pollution

Satellite mapping of CO emission from forest fires in Northwest America using MOPITT measurements, J. Liu, J.R. Drummond, Q. Li, J.C. Gille and D.C. Ziskin, 95:502

Coarse resolution imagery

A method for detecting large-scale forest cover change using coarse spatial resolution imagery, R.H. Fraser, A. Atuelgasim and R. Latifovic, 95:414

Coarse spatial resolution

Land cover change detection at coarse spatial scales based on iterative estimation and previous state information, S. Le Hégarat-Masclé, C. Ottlé and C. Guérin, 95:464

Coastal waters

Estimating phytoplankton biomass in coastal waters of Alaska using airborne remote sensing, M.A. Montes-Hugo, K. Carder, R.J. Foy, J. Cannizzaro, E. Brown and S. Pegau, 98:481

Coastal wetlands

Identifying optimal spectral bands from in situ measurements of Great Lakes coastal wetlands using second-derivative analysis, B.L. Becker, D.P. Lusch and J. Qi, 97:238

Coastal zones

Stereo observation of lakes and coastal zones using ASTER imagery, J. Matthews, 99:16

Combination of belief functions

Analysis of convergent evidence in an evidential reasoning knowledge-based classification, Y. Cohen and M. Shoshany, 96:518

Comparative analysis

A comparative analysis of the Global Land Cover 2000 and MODIS land cover data sets, C. Giri, Z. Zhu and B. Reed, 94:123

Comparison

Intercomparison of ground-based microwave remote sensing measurements of stratospheric ozone over the Mendoza region, Argentina with HALOE data, C.M. Puliafito and S.E. Puliafito, 94:61

Complexity-penalized maximum likelihood

On the choice of spatial and categorical scale in remote sensing land cover classification, J. Ju, S. Gopal and E.D. Kolaczyk, 96:62

Composite

Multi-platform comparisons of MODIS and AVHRR normalized difference vegetation index data, K. Gallo, L. Ji, B. Reed, J. Eidenshink and J. Dwyer, 99:221

Composite burn index

Evaluation of remotely sensed indices for assessing burn severity in interior Alaska using Landsat TM and ETM+, J. Epting, D. Verbyla and B. Sorbel, 96:328

Composites

Assessment of multitemporal compositing techniques of MODIS and AVHRR images for burned land mapping, E. Chuvieco, G. Ventura, M.P. Martín and I. Gómez, 94:450

Conditional simulation

Comparison of regression and geostatistical methods for mapping Leaf Area Index (LAI) with Landsat ETM+ data over a boreal forest, M. Berterretche, A.T. Hudak, W.B. Cohen, T.K. Maierseperger, S.T. Gower and J. Dungan, 96:49

Contextual

A contextual classification scheme based on MRF model with improved parameter estimation and multiscale fuzzy line process, B. Tso and R.C. Olsen, 97:127

Contextual classification

Combining spectral and spatial information to map canopy damage from selective logging and forest fires, C.M. Souza Jr., D.A. Roberts and M.A. Cochrane, 98:329

Continental surfaces

ENVISAT radar altimeter measurements over continental surfaces and ice caps using the ICE-2 retracking algorithm, B. Legresy, F. Papa, F. Remy, G. Vinay, M. van den Bosch and O.-Z. Zanife, 95:150

Continuum

Mapping microphytobenthos biomass by non-linear inversion of visible-infrared hyperspectral images, J.-P. Combe, P. Launeau, V. Carrère, D. Despan, V. Méléder, L. Barillé and C. Sotin, 98:371

Coral reef

Detection of shallow subtidal corals from IKONOS satellite and QTC View (50, 200 kHz) single-beam sonar data (Arabian Gulf; Dubai, UAE), B.M. Riegl and S.J. Purkis, 95:96

Costa Rica

Mapping PAR using MODIS atmosphere products, P.E. Van Laake and G.A. Sanchez-Azofeifa, 94:554

Cotton

Multiple shadow fractions in spectral mixture analysis of a cotton canopy, G.J. Fitzgerald, P.J. Pinter Jr., D.J. Hunsaker and T.R. Clarke, 97:526

Cover

Mapping forest structure for wildlife habitat analysis using waveform lidar: Validation of montane ecosystems, P. Hyde, R. Dubayah, B. Peterson, J.B. Blair, M. Hofton, C. Hunsaker, R. Knox and W. Walker, 96:427

Crop classification

On the relationship between training sample size and data dimensionality: Monte Carlo analysis of broadband multi-temporal classification, T.G. Van Niel, T.R. McVicar and B. Datt, 98:468

Crop yield

Application of MODIS derived parameters for regional crop yield assessment, P.C. Doraiswamy, T.R. Sinclair, S. Hollinger, B. Akhmedov, A. Stern and J. Prueger, 97:192

Crop yield forecasting

Image masking for crop yield forecasting using AVHRR NDVI time series imagery, Jude H. Kastens, T.L. Kastens, D.L.A. Kastens, K.P. Price, E.A. Martinko and R.-Y. Lee, 99:341

Cropland

Spatial and temporal patterns of China's cropland during 1990-2000: An analysis based on Landsat TM data, J. Liu, M. Liu, H. Tian, D. Zhuang, Z. Zhang, W. Zhang, X. Tang and X. Deng, 98:442

Croplands

The relative importance of light-use efficiency modifications from environmental conditions and cultivation for estimation of large-scale net primary productivity, J.B. Bradford, J.A. Hicke and W.K. Lauenroth, 96:246

Cropping

The relative importance of light-use efficiency modifications from environmental conditions and cultivation for estimation of large-scale net primary productivity, J.B. Bradford, J.A. Hicke and W.K. Lauenroth, 96:246

Crops

Discrimination of sugarcane varieties in Southeastern Brazil with EO-1 Hyperion data, L.S. Galvão, A.R. Formaggio and D.A. Tisot, 94:523

Cross-correlation

Surface motion of mountain glaciers derived from satellite optical imagery, E. Berthier, H. Vadon, D. Baratoux, Y. Arnaud, C. Vincent, K.L. Feigl, F. Rémy and B. Legrésy, 95:14

Cross-validation

Maximum posterior probability estimators of map accuracy, B.M. Steele, 99:254

Crown area

Shadow allometry: Estimating tree structural parameters using hyperspatial image analysis, J.A. Greenberg, S.Z. Dobrowski and S.L. Ustin, 97:15

Cryosphere

Multispectral imaging contributions to global land ice measurements from space, J.S. Kargel, M.J. Abrams, M.P. Bishop, A. Bush, G. Hamilton, H. Jiskoot, A. Kääb, H.H. Kieffer, E.M. Lee, F. Paul, F. Rau, B. Raup, J.F. Shroder, D. Soltész, D. Stainforth, L. Stearns and R. Wessels, 99:187

Cultivation

The relative importance of light-use efficiency modifications from environmental conditions and cultivation for estimation of large-scale net primary productivity, J.B. Bradford, J.A. Hicke and W.K. Lauenroth, 96:246

Curnamona

Seamless geological map generation using ASTER in the Broken Hill-Cumamona province of Australia, R.D. Hewson, T.J. Cudahy, S. Mizuhiko, K. Ueda and A.J. Mauger, 99:159

3-D radiative effects

A simple method for removing 3-D radiative effects in satellite retrievals of surface irradiance, K. Wyser, W. O'Hirok and C. Gautier, 94:335

Dark spot detection

Oil spill detection by satellite remote sensing, C. Brekke and A.H.S. Solberg, 95:1

Data assimilation

Using coarse remote sensing radar observations to control the trajectory of a simple Sahelian land surface model, L. Jarlan, E. Mougin, P. Mazzega, M. Schoenauer, Y. Tracol, P. Hiernaux, 94:269

Data continuity

Multi-platform comparisons of MODIS and AVHRR normalized difference vegetation index data, K. Gallo, L. Ji, B. Reed, J. Eidsink and J. Dwyer, 99:221

Data merging

Consistent merging of satellite ocean color data sets using a bio-optical model, S. Maritorena and D.A. Siegel, 94:429

DBH

Shadow allometry: Estimating tree structural parameters using hyperspatial image analysis, J.A. Greenberg, S.Z. Dobrowski and S.L. Ustin, 97:15

Debris flows

Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments, G. Metternicht, L. Humi and R. Gogu, 98:284

Decision tree regression

Decision tree regression for soft classification of remote sensing data, M. Xu, P. Watanachaturaporn, P.K. Varshney and M.K. Arora, 97:322

Decision trees

A change detection model based on neighborhood correlation image analysis and decision tree classification, J. Im and J.R. Jensen, 99:326

Deforestation

Survival analysis of a neotropical rainforest using multitemporal satellite imagery, J.A. Greenberg, S.C. Kefauver, H.C. Stimson, C.J. Yeaton and S.L. Ustin, 96:202

Degraded forest

Carbon budget estimation in Central Amazonia: Successional forest modeling from remote sensing data, T. Neeff, P.M. de Alencastro Graça, L.V. Dutra and C. da Costa Freitas, 94:508

DEM

Towards operational monitoring of a northern wetland using geomatics-based techniques, J. Töyrä and A. Pietroniro, 97:174

Dempster-Shafer theory of evidence

Analysis of convergent evidence in an evidential reasoning knowledge-based classification, Y. Cohen and M. Shoshany, 96:518

Depth

Effects of channel morphology and sensor spatial resolution on image-derived depth estimates, C.J. Legleiter and D.A. Roberts, 95:231

Desert

A new index for mapping lichen-dominated biological soil crusts in desert areas, J. Chen, M. Yuan Zhang, L. Wang, H. Shimazaki and M. Tamura, 96:165

Mapping North African landforms using continental scale unmixing of MODIS imagery, J.-A.C. Ballantine, G.S. Okin, D.E. Prentiss and D.A. Roberts, 97:470

2nd derivatives

Identifying optimal spectral bands from in situ measurements of Great Lakes coastal wetlands using second-derivative analysis, B.L. Becker, D.P. Lusch and J. Qi, 97:238

Detectability

Oil spill detection by satellite remote sensing, C. Brekke and A.H.S. Solberg, 95:1

Differential absorption lidar

Comparison of active and passive water vapor remote sensing from space: An analysis based on the simulated performance of IASI and space borne differential absorption lidar, V. Wulfmeyer, H. Bauer, P. Di Girolamo and C. Serio, 95:211

Differential SAR Interferometry (DInSAR)

Mapping ground subsidence induced by aquifer overexploitation using advanced Differential SAR Interferometry: Vega Media of the Segura River (SE Spain) case study, R. Tomás, Y. Márquez, J.M. Lopez-Sanchez, J. Delgado, P. Blanco, J.J. Mallorquí, M. Martínez, G. Herrera and J. Mulas, 98:269

Digital aerial photographs

Performance of different spectral and textural aerial photograph features in multi-source forest inventory, S. Tuominen and A. Pekkarinen, 94:256

Digital elevation model

Application of wavelet analysis to the study of spatial pattern of morphotectonic lineaments in digital terrain models. A case study, G. Jordan and B. Schott, 94:31

Combination of SRTM3 and repeat ASTER data for deriving alpine glacier flow velocities in the Bhutan Himalaya, A. Kääb, 94:463

Modelling local distribution of an Arctic dwarf shrub indicates an important role for remote sensing of snow cover, P.S.A. Beck, E. Kalmbach, D. Joly, A. Stien and L. Nilsen, 98:110

Digital terrain modelling

Application of wavelet analysis to the study of spatial pattern of morphotectonic lineaments in digital terrain models. A case study, G. Jordan and B. Schott, 94:31

Dimensionality

On the relationship between training sample size and data dimensionality: Monte Carlo analysis of broadband multi-temporal classification, T.G. Van Niel, T.R. McVicar and B. Datt, 98:468

Discharge observations

Flood monitoring over the Mackenzie River Basin using passive microwave data, M. Temimi, R. Leconte, F. Brissette and N. Chaouch, 98:344

Discolored seawater

Discolored seawater detection using ASTER reflectance products: A case study of Satsuma-Iwojima, Japan, M. Urai and S. Machida, 99:95

Discriminant analysis

Discrimination of sugarcane varieties in Southeastern Brazil with EO-1 Hyperion data, L.S. Galvão, A.R. Formaggio and D. Arnold Tisot, 94:523

Disturbance

Comparison of Tasseled Cap-based Landsat data structures for use in forest disturbance detection, S.P. Healey, W.B. Cohen, Y. Zhiqiang and O.N. Krankina, 97:301

Disturbance index

Comparison of Tasseled Cap-based Landsat data structures for use in forest disturbance detection, S.P. Healey, W.B. Cohen, Y. Zhiqiang and O.N. Krankina, 97:301

Diurnal cycle

Remote sensing of sunlight-induced chlorophyll fluorescence and reflectance of Scots pine in the boreal forest during spring recovery, J. Louis, A. Ounis, J.-M. Ducruet, S. Evain, T. Laurila, T. Thum, M. Aurela, G. Wingsle, L. Alonso, R. Pedros and I. Moya, 96:37

Diurnal variation

Diurnal variations in AVHRR SST fields: A strategy for removing warm layer effects from daily images, B. Buongiorno Nardelli, S. Marullo and R. Santoleri, 95:47

DInSAR

Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments, G. Metternicht, L. Hurni and R. Gogu, 98:284

DMSP-OLS night lights

Spatial analysis of global urban extent from DMSP-OLS night lights, C. Small, F. Pozzi and C.D. Elvidge, 96:277

Drained thaw lake basins

Satellite remote sensing classification of thaw lakes and drained thaw lake basins on the North Slope of Alaska, R.C. Frohn, K.M. Hinkel and W.R. Eisner, 97:116

Drought stress

Spectral sensing of foliar water conditions in two co-occurring conifer species: *Pinus edulis* and *Juniperus monosperma*, H.C. Stimson, D.D. Breshears, S.L. Ustin and S.C. Kefauver, 96:108

Dry/wet snow mapping

Mapping dry/wet snow cover in the Indian Himalayas using IRS multispectral imagery, R.P. Gupta, U.K. Haritashya and P. Singh, 97:458

Dust source

Mapping North African landforms using continental scale unmixing of MODIS imagery, J.-A.C. Ballantine, G.S. Okin, D.E. Prentiss and D.A. Roberts, 97:470

Dynamic canopy model

Use of coupled canopy structure dynamic and radiative transfer models to estimate biophysical canopy characteristics, B. Koetz, F. Baret, H. Poilvé and J. Hill, 95:115

Earth Observing-1

Substrate age and precipitation effects on Hawaiian forest canopies from spaceborne imaging spectroscopy, G.P. Asner, K.M. Carlson and R.E. Martin, 98:457

Earthquake

Assessing the potential of thermal infrared satellite surveys for monitoring seismically active areas: The case of Kocaeli (İzmit) earthquake, August 17, 1999, V. Tramutoli, V. Cuomo, C. Filizzola, N. Pergola and C. Pietrapertosa, 96:409

Ecological modeling

Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height, T. Neeff, G.S. Biging, L.V. Dutra, C.C. Freitas and J.R. dos Santos, 97:484

Ecosystem model

Estimation of net primary productivity by integrating remote sensing data with an ecosystem model, M.K. Hazarika, Y. Yasuoka, A. Ito and D. Dye, 94:298

Ecuador

Survival analysis of a neotropical rainforest using multitemporal satellite imagery, J.A. Greenberg, S.C. Kefauver, H.C. Stimson, C.J. Yeaton and S.L. Ustin, 96:202

Eddies

New tools for the study of oceanic eddies: Satellite derived inherent optical properties, F.E. Hoge and P.E. Lyon, 95:444

Eddy covariance

Predicting riparian evapotranspiration from MODIS vegetation indices and meteorological data, P.L. Nagler, J. Cleverly, E. Glenn, D. Lampkin, A. Huete and Z. Wan, 94:17

Eddy kinetic energy

Seasonal and interannual variability of surface circulation in the Cape Verde region from 8 years of merged T/P and ERS-2 altimeter data, C. Lázaro, M. Joana Fernandes, A. Miguel P. Santos and P. Oliveira, 98:45

Edge detection method

Application of an edge detection method to satellite images for distinguishing sea surface temperature fronts near the Japanese coast, T. Shimada, F. Sakaida, H. Kawamura and T. Okumura, 98:21

Elemental emission factor

Testing the potential of multi-spectral remote sensing for retrospectively estimating fire severity in African Savannas, A.M.S. Smith, M.J. Wooster, N.A. Drake, F.M. Dipotso, M.J. Falkowski and A.T. Hudak, 97:92

Emissivity

Extending surface temperature and emissivity retrieval to the mid-infrared (3–5 μm) using the Multispectral Thermal Imager (MTI), A. Mushkin, L.K. Balick and A.R. Gillespie, 98:141

Surface mineral mapping at Steamboat Springs, Nevada, USA, with multi-wavelength thermal infrared images, R.G. Vaughan, S.J. Hook, W.M. Calvin and J.V. Taranik, 99:140

Canopy directional emissivity: Comparison between models, J.A. Sobrino, J.C. Jiménez-Muñoz and W. Verhoef, 99:304

Emissivity spectra

In situ angular measurements of thermal infrared sea surface emissivity—Validation of models, R. Niclòs, E. Valor, V. Caselles, C. Coll and J.M. Sánchez, 94:83

Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared "radiance-at-sensor" data, Yoshiki Ninomiya, B. Fu and T.J. Cudahy, 99:127

Emittance

Lithologic mapping of the Mordor, NT, Australia ultramafic complex by using the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER), Lawrence C. Rowan, J.C. Mars and C.J. Simpson, 99:105

Enhanced vegetation index

Mapping paddy rice agriculture in southern China using multi-temporal MODIS images, X. Xiao, S. Boles, J. Liu, D. Zhuang, S. Froking, C. Li, W. Salas and B. Moore III, 95:480

A simple and effective radiometric correction method to improve landscape change detection across sensors and across time, X. Chen, L. Vierling and D. Deering, 98:63

Enhancement classification method

Mapping lichen in a caribou habitat of Northern Quebec, Canada, using an enhancement-classification method and spectral mixture analysis, J. Théau, D.R. Peddle and C.R. Duguay, 94:232

ENSO

Spatial and temporal patterns of remotely-sensed and field-measured rainfall in southern California, N.P. Nezlin and E.D. Stein, 96:228

ENVISAT

Evaluation of a rough soil surface description with ASAR-ENVISAT radar data, M. Zribi, N. Baghdadi, N. Holah, O. Fafin and C. Guérin, 95:67

ENVISAT radar altimeter measurements over continental surfaces and ice caps using the ICE-2 retracking algorithm, B. Legresy, F. Papa, F. Remy, G. Vinay, M. van den Bosch and O.-Z. Zanife, 95:150

Wake effects of large offshore wind farms identified from satellite SAR, M.B. Christiansen and C.B. Hasager, 98:251

ENVISAT-ASAR

New methodology for soil surface moisture estimation and its application to ENVISAT-ASAR multi-incidence data inversion, M. Zribi, N. Baghdadi, N. Holah and O. Fafin, 96:485

EO-1

Mineral mapping on the Chilean-Bolivian Altiplano using co-orbital ALI, ASTER and Hyperion imagery: Data dimensionality issues and solutions, B.E. Hubbard and J.K. Crowley, 99:173

Equilibrium distribution models

Modelling local distribution of an Arctic dwarf shrub indicates an important role for remote sensing of snow cover, P.S.A. Beck, E. Kalmbach, D. Joly, A. Stien and L. Nilsen, 98:110

Error analysis

Factors affecting remotely sensed snow water equivalent uncertainty, J. Dong, J.P. Walker and P.R. Houser, 97:68

ERS-2

Wake effects of large offshore wind farms identified from satellite SAR, M.B. Christiansen and C.B. Hasager, 98:251

ERS scatterometer

Land surface parameter monitoring with ERS scatterometer data over the Sahel: A comparison between agro-pastoral and pastoral areas, S. Zine, L. Jarlan, P.-L. Frison, E. Mougin, P. Hiernaux and J.-P. Rudant, 96:438

ERS/SAR

Land surface parameter monitoring with ERS scatterometer data over the Sahel: A comparison between agro-pastoral and pastoral areas, S. Zine, L. Jarlan, P.-L. Frison, E. Mougin, P. Hiernaux and J.-P. Rudant, 96:438

Eruption precursor

ASTER observations of thermal anomalies preceding the April 2003 eruption of Chikurachki volcano, Kurile Islands, Russia, D. Pieri and M. Abrams, 99:84

ET

Predicting riparian evapotranspiration from MODIS vegetation indices and meteorological data, P.L. Nagler, J. Cleverly, E. Glenn, D. Lampkin, A. Huete and Z. Wan, 94:17

ETM+

A hybrid inversion method for mapping leaf area index from MODIS data: experiments and application to broadleaf and needleleaf canopies, H. Fang and S. Liang, 94:405

Landsat-7 ETM+ radiometric normalization comparison for northern mapping applications, I. Olthof, D. Pouliot, R. Fernandes and R. Latifovic, 95:388

Euphrates River

Using MODIS snow cover maps in modeling snowmelt runoff process in the eastern part of Turkey, A. Emre Tekeli, Z. Akyürek, A. Arda Şorman, A. Şensoy and A. Ünal Şorman, 97:216

European Alps

A new GLM-based method for mapping tree cover continuous fields using regional MODIS reflectance data, M. Schwarz and N.E. Zimmermann, 95:428

Evapotranspiration

Estimating evapotranspiration of European forests from NOAA-imagery at satellite overpass time: Towards an operational processing chain for integrated optical and thermal sensor data products, W.W. Verstraeten, F. Veroustraete and J. Feyen, 96:256

Retrieval of evapotranspiration over the Alpilles/ReSeDA experimental site using airborne POLDER sensor and a thermal camera, M. Gómez, A. Olioso, J.A. Sobrino and F. Jacob, 96:399

Evapotranspiration on western U.S. rivers estimated using the Enhanced Vegetation Index from MODIS and data from eddy covariance and Bowen ratio flux towers, P.L. Nagler, R.L. Scott, C. Westenberg, J.R. Cleverly, E.P. Glenn and A.R. Huete, 97:337

A local-scale, high-resolution evapotranspiration mapping algorithm (ETMA) with hydroecological applications at riparian meadow restoration sites, S.P. Loheide II and S.M. Gorelick, 98:182

EVI

Predicting riparian evapotranspiration from MODIS vegetation indices and meteorological data, P.L. Nagler, J. Cleverly, E. Glenn, D. Lampkin, A. Huete and Z. Wan, 94:17

On the relationship of NDVI with leaf area index in a deciduous forest site, Q. Wang, S. Adiku, J. Tenhunen and A. Granier, 94:244

Evolution strategies

Using coarse remote sensing radar observations to control the trajectory of a simple Sahelian land surface model, L. Jarlan, E. Mougin, P. Mazzega, M. Schoenauer, Y. Tracol, P. Hiernaux, 94:269

Factorial kriging

Geostatistical and local cluster analysis of high resolution hyperspectral imagery for detection of anomalies, P. Goovaerts, G.M. Jacquez and A. Marcus, 95:351

FAPAR

Estimating light absorption by chlorophyll, leaf and canopy in a deciduous broadleaf forest using MODIS data and a radiative transfer model, Q. Zhang, X. Xiao, B. Braswell, E. Linder, F. Baret and B. Moore III, 99:357

Feature extraction

Oil spill detection by satellite remote sensing, C. Brekke and A.H.S. Solberg, 95:1

Felsic

Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared "radiance-at-sensor" data, Y. Ninomiya, B. Fu and T.J. Cudahy, 99:127

Finite mixture model

On the choice of spatial and categorical scale in remote sensing land cover classification, J. Ju, S. Gopal and E.D. Kolaczyk, 96:62

Fire

Field work and statistical analyses for enhanced interpretation of satellite fire data, M.F. Cardoso, G.C. Hurtt, B. Moore III, C.A. Nobre and H. Bain, 96:212

Evaluation of remotely sensed indices for assessing burn severity in interior Alaska using Landsat TM and ETM+, J. Epting, D. Verbyla and B. Sorbel, 96:328

Prototyping a global algorithm for systematic fire-affected area mapping using MODIS time series data, D.P. Roy, Y. Jin, P.E. Lewis and C.O. Justice, 97:137

Fire-affected area

Prototyping a global algorithm for systematic fire-affected area mapping using MODIS time series data, D.P. Roy, Y. Jin, P.E. Lewis and C.O. Justice, 97:137

Fire emission

Satellite mapping of CO emission from forest fires in Northwest America using MOPITT measurements, J. Liu, J.R. Drummond, Q. Li, J.C. Gille and D.C. Ziskin, 95:502

Fire severity

Testing the potential of multi-spectral remote sensing for retrospectively estimating fire severity in African Savannas, A.M.S. Smith, M.J. Wooster, N.A. Drake, F.M. Dipotso, M.J. Falkowski and A.T. Hudak, 97:92

FLD principle

Remote sensing of sunlight-induced chlorophyll fluorescence and reflectance of Scots pine in the boreal forest during spring recovery, J. Louis, A. Ounis, J.-M. Ducruet, S. Evain, T. Laurila, T. Thum, M. Aurela, G. Wingsle, L. Alonso, R. Pedros and I. Moya, 96:37

Flood forecast

Improving soil wetness variations monitoring from passive microwave satellite data: The case of April 2000 Hungary flood, T. Lacava, V. Cuomo, E.V. Di Leo, N. Pergola, F. Romano and V. Tramutoli, 96:135

Flood mapping

Towards operational monitoring of a northern wetland using geomatics-based techniques, J. Töyrä and A. Pietroniro, 97:174

Flood monitoring

Flood monitoring over the Mackenzie River Basin using passive microwave data, M. Temimi, R. Leconte, F. Brissette and N. Chaouch, 98:344

Fluorescence line height

Red tide detection and tracing using MODIS fluorescence data: A regional example in SW Florida coastal waters, C. Hu, F.E. Muller-Karger, C.(Judd) Taylor, K.L. Carder, C. Kelble, E. Johns and C.A. Heil, 97:311

Foliar water content

Spectral sensing of foliar water conditions in two co-occurring conifer species: *Pinus edulis* and *Juniperus monosperma*, H.C. Stimson, D.D. Breshears, S.L. Ustin and S.C. Kefauver, 96:108

Forecasting

Using MODIS snow cover maps in modeling snowmelt runoff process in the eastern part of Turkey, A. Emre Tekeli, Z. Akyürek, A. Arda Şorman, A. Şensoy and A. Ünal Şorman, 97:216

Forest

BRDF measurement of understory vegetation in pine forests: dwarf shrubs, lichen, and moss, J.I. Peltoniemi, S. Kaasalainen, J. Näränen, M. Rautiainen, P. Stenberg, H. Smolander, S. Smolander and P. Voipio, 94:343

Patterns of covariance between forest stand and canopy structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:517

Geographic variability in lidar predictions of forest stand structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:532

Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns, E.J. Laurent, H. Shi, D. Gatzolis, J.P. LeBouton, M.B. Walters and J. Liu, 97:249

Forest change detection

Comparison of time series tasseled cap wetness and the normalized difference moisture index in detecting forest disturbances, S. Jin and S.A. Sader, 94:364

Forest degradation

Combining spectral and spatial information to map canopy damage from selective logging and forest fires, C.M. Souza Jr., D.A. Roberts and M.A. Cochrane, 98:329

Forest disturbance

MODIS time-series imagery for forest disturbance detection and quantification of patch size effects, S. Jin and S.A. Sader, 99:462

Forest fires

Assessment of multitemporal compositing techniques of MODIS and AVHRR images for burned land mapping, E. Chuvieco, G. Ventura, M.P. Martin and I. Gómez, 94:450

Forest growth

Estimating forest growth using canopy metrics derived from airborne laser scanner data, E. Næsset and T. Gobakken, 96:453

Forest health

Using AVIRIS to assess hemlock abundance and early decline in the Catskills, New York, J. Pontius, R. Hallett and M. Martin, 97:163

Forest inventory

Automated tree recognition in old growth conifer stands with high resolution digital imagery, D.G. Leckie, F.A. Gougeon, S. Tinis, T. Nelson, C.N. Burnett and D. Paradine, 94:311

Comparing regression methods in estimation of biophysical properties of forest stands from two different inventories using laser scanner data, E. Næsset, O.M. Bollandas and T. Gobakken, 94:541

Assessing sensor effects and effects of leaf-off and leaf-on canopy conditions on biophysical stand properties derived from small-footprint airborne laser data, E. Næsset, 98:356

Forest monitoring

Estimating forest growth using canopy metrics derived from airborne laser scanner data, E. Næsset and T. Gobakken, 96:453

Forest structure

Mapping tropical forest structure in southeastern Madagascar using remote sensing and artificial neural networks, J.C. Ingram, T.P. Dawson and R.J. Whittaker, 94:491

Forest type

Comparison of time series tasseled cap wetness and the normalized difference moisture index in detecting forest disturbances, S. Jin and S.A. Sader, 94:364

Forestry

Estimating forest canopy fuel parameters using LIDAR data, H.-E. Andersen, R.J. McGaughey and S.E. Reutebuch, 94:441

Shadow allometry: Estimating tree structural parameters using hyper-spatial image analysis, J.A. Greenberg, S.Z. Dobrowski and S.L. Ustin, 97:15

forests

A method for detecting large-scale forest cover change using coarse spatial resolution imagery, R.H. Fraser, A. Abuelgasim and R. Latifovic, 95:414

Forward and inverse modeling

Modeling spectral reflectance of optically complex waters using bio-optical measurements from Tokyo Bay, H. Feng, J.W. Campbell, M.D. Dowell and T.S. Moore, 99:232

Fractional cover

A new GLM-based method for mapping tree cover continuous fields using regional MODIS reflectance data, M. Schwarz and N.E. Zimmermann, 95:428

Fractional green vegetation cover

A comparison of methods for estimating fractional green vegetation cover within a desert-to-upland transition zone in central New Mexico, USA, J. Xiao and A. Moody, 98:237

Freshwater discharge

Stormwater runoff plumes observed by SeaWiFS radiometer in the Southern California Bight, N.P. Nezlin, P.M. DiGiacomo, E.D. Stein and D. Ackerman, 98:494

Functional models

Parametric (modified least squares) and non-parametric (Theil–Sen) linear regressions for predicting biophysical parameters in the presence of measurement errors, R. Fernandes and S.G. Leblanc, 95:303

Fusion

Combination of SRTM3 and repeat ASTER data for deriving alpine glacier flow velocities in the Bhutan Himalaya, A. Kääb, 94:463

Fuzzy

A contextual classification scheme based on MRF model with improved parameter estimation and multiscale fuzzy line process, B. Tso and R.C. Olsen, 97:127

Fuzzy-k-means

Optimization of sampling schemes for vegetation mapping using fuzzy classification, R. Tapia, A. Stein and W. Bijker, 99:425

Ganges

Ganges and Indus river basin land use/land cover (LULC) and irrigated area mapping using continuous streams of MODIS data, P.S. Thenkabail, M. Schull and H. Tural, 95:317

GAP

Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns, E.J. Laurent, H. Shi, D. Gatzolis, J.P. LeBouton, M.B. Walters and J. Liu, 97:249

Generalized linear models

A new GLM-based method for mapping tree cover continuous fields using regional MODIS reflectance data, M. Schwarz and N.E. Zimmermann, 95:428

Geographic Information System

Statistical evaluation of remotely sensed snow-cover products with constraints from streamflow and SNOTEL measurements, X. Zhou, H. Xie and J.M.H. Hendrickx, 94:214

Geographical information system

Modelling local distribution of an Arctic dwarf shrub indicates an important role for remote sensing of snow cover, P.S.A. Beck, E. Kalmbach, D. Joly, A. Stien and L. Nilsen, 98:110

Geological features

Mapping regional land displacements in the Venice coastland by an integrated monitoring system, P. Teatini, L. Tosi, T. Strozzi, L. Carbognin, U. Wegmüller and F. Rizzetto, 98:403

Geological mapping

Seamless geological map generation using ASTER in the Broken Hill–Cumamona province of Australia, R.D. Hewson, T.J. Cudahy, S. Mizuhiko, K. Ueda and A.J. Mauger, 99:159

Geology

Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared “radiance-at-sensor” data, Y. Ninomiya, B. Fu and T.J. Cudahy, 99:127

Geomatics

Towards operational monitoring of a northern wetland using geomatics-based techniques, J. Töyrä and A. Pietroniro, 97:174

Geometrical model

Canopy directional emissivity: Comparison between models, J.A. Sobrino, J.C. Jiménez-Muñoz and W. Verhoef, 99:304

Geostrophic surface currents

Seasonal and interannual variability of surface circulation in the Cape Verde region from 8 years of merged T/P and ERS-2 altimeter data, C. Lázaro, M.J. Fernandes, A.M.P. Santos and P. Oliveira, 98:45

Geothermal exploration

Surface mineral mapping at Steamboat Springs, Nevada, USA, with multi-wavelength thermal infrared images, R.G. Vaughan, S.J. Hook, W.M. Calvin and J.V. Taranik, 99:140

GHRSS-PP

Diurnal variations in AVHRR SST fields: A strategy for removing warm layer effects from daily images, B. Buongiorno Nardelli, S. Marullo and R. Santoleri, 95:47

Gibbs distribution

Super-resolution land cover mapping using a Markov random field based approach, T. Kasetkasem, M.K. Arora and P.K. Varshney, 96:302

GIS

Detecting major terrain parameters relating to mass movements’ occurrence using GIS, remote sensing and statistical correlations, case study Lebanon, C. Abdallah, J. Chorowicz, R. Bou Kheir and M. Khawlie, 99:448

Glacier flow

Combination of SRTM3 and repeat ASTER data for deriving alpine glacier flow velocities in the Bhutan Himalaya, A. Kääb, 94:463

Glacier Land Ice Measurements from Space

Multispectral imaging contributions to global land ice measurements from space, J.S. Kargel, M.J. Abrams, M.P. Bishop, A. Bush, G. Hamilton, H. Jiskoot, A. Kääb, H.H. Kieffer, E.M. Lee, F. Paul, F. Rau, B. Raup, J.F. Shroder, D. Soltesz, D. Stainforth, L. Stearns and R. Wessels, 99:187

Glacier monitoring

Multispectral imaging contributions to global land ice measurements from space, J.S. Kargel, M.J. Abrams, M.P. Bishop, A. Bush, G. Hamilton, H. Jiskoot, A. Kääb, H.H. Kieffer, E.M. Lee, F. Paul, F. Rau, B. Raup, J.F. Shroder, D. Soltesz, D. Stainforth, L. Stearns and R. Wessels, 99:187

Glaciology

Glacial cover mapping (1987–1996) of the Cordillera Blanca (Peru) using satellite imagery, W. Silverio and J.-M. Jaquet, 95:342

GLIMS

Multispectral imaging contributions to global land ice measurements from space, J.S. Kargel, M.J. Abrams, M.P. Bishop, A. Bush, G. Hamilton, H. Jiskoot, A. Kääb, H.H. Kieffer, E.M. Lee, F. Paul, F. Rau, B. Raup, J.F. Shroder, D. Soltesz, D. Stainforth, L. Stearns and R. Wessels, 99:187

GLM

A new GLM-based method for mapping tree cover continuous fields using regional MODIS reflectance data, M. Schwarz and N.E. Zimmermann, 95:428

Global change

Global biomass mapping for an improved understanding of the CO₂ balance—the Earth observation mission Carbon-3D, S. Hese, W. Lucht, C. Schmullius, M. Barnsley, R. Dubayah, D. Knorr, K. Neumann, T. Riedel and K. Schröter, 94:94

Global land cover

A comparative analysis of the Global Land Cover 2000 and MODIS land cover data sets, C. Giri, Z. Zhu and B. Reed, 94:123

Global Positioning System

Mapping regional land displacements in the Venice coastland by an integrated monitoring system, P. Teatini, L. Tosi, T. Strozzi, L. Carbognin, U. Wegmüller and F. Rizzetto, 98:403

Global primary production

Improvements of the MODIS terrestrial gross and net primary production global data set, M. Zhao, F.A. Heinsch, R.A. Nemani and S.W. Running, 95:164

Global urban land cover

Spatial analysis of global urban extent from DMSP-OLS night lights, C. Small, F. Pozzi and C.D. Elvidge, 96:277

High spatial resolution

Surface energy fluxes with the Advanced Spaceborne Thermal Emission and Reflection radiometer (ASTER) at the Iowa 2002 SMACEX site (USA), A.N. French, F. Jacob, M.C. Anderson, W.P. Kustas, W. Timmermans, A. Gieske, Z. Su, H. Su, M.F. McCabe, F. Li, J. Prueger and N. Brunsell, 99:55

High spatial resolution multispectral image

A change detection model based on neighborhood correlation image analysis and decision tree classification, J. Im and J.R. Jensen, 99:326

Himalaya

Combination of SRTM3 and repeat ASTER data for deriving alpine glacier flow velocities in the Bhutan Himalaya, A. Kääb, 94:463

Himalayas

Mapping dry/wet snow cover in the Indian Himalayas using IRS multispectral imagery, R.P. Gupta, U.K. Haritashya and P. Singh, 97:458

Hoary cress

Discrimination of hoary cress and determination of its detection limits via hyperspectral image processing and accuracy assessment techniques, J.T. Mundt, N.F. Glenn, K.T. Weber, T.S. Prather, L.W. Lass and J. Pettingill, 96:509

Hotspot

Global mapping of foliage clumping index using multi-angular satellite data, J.M. Chen, C.H. Menges and S.G. Leblanc, 97:447

Hydroecology

A local-scale, high-resolution evapotranspiration mapping algorithm (ETMA) with hydroecological applications at riparian meadow restoration sites, S.P. Loheide II and S.M. Gorelick, 98:182

Hydrological model

A feasible method for fractional snow cover mapping in boreal zone based on a reflectance model, S.J. Metsämäki, S.T. Anttila, H.J. Markus and J.M. Vepsäläinen, 95:77

Hydrology

Floodplain water storage in the Negro River basin estimated from microwave remote sensing of inundation area and water levels, F. Frappart, F. Seyler, J.-M. Martinez, J.G. León and A. Cazenave, 99:387

Hydro-optical model

Operational algorithm for the retrieval of water quality in the Great Lakes, D. Pozdnyakov, R. Shuchman, A. Korosov and C. Hatt, 97:352

Hyperion

Discrimination of sugarcane varieties in Southeastern Brazil with EO-1 Hyperion data, L.S. Galvão, A.R. Formaggio and D.A. Tisot, 94:523

Substrate age and precipitation effects on Hawaiian forest canopies from spaceborne imaging spectroscopy, G.P. Asner, K.M. Carlson and R.E. Martin, 98:457

Mineral mapping on the Chilean-Bolivian Altiplano using co-orbital ALI, ASTER and Hyperion imagery: Data dimensionality issues and solutions, B.E. Hubbard and J.K. Crowley, 99:173

Hyperspatial imagery

Shadow allometry: Estimating tree structural parameters using hyperspatial image analysis, J.A. Greenberg, S.Z. Dobrowski and S.L. Ustin, 97:15

Hyperspectral

Remote sensing of forest biophysical variables using HyMap imaging spectrometer data, M. Schlerf, C. Atzberger and J. Hill, 95:177

Ecosystem structure along bioclimatic gradients in Hawai'i from imaging spectroscopy, G.P. Asner, A.J. Elmore, R. Flint Hughes, A.S. Warner and P.M. Vitousek, 96:497

Identifying optimal spectral bands from in situ measurements of Great Lakes coastal wetlands using second-derivative analysis, B.L. Becker, D.P. Lusch and J. Qi, 97:238

Multiple shadow fractions in spectral mixture analysis of a cotton canopy, G.J. Fitzgerald, P.J. Pinter Jr., D.J. Hunsaker and T.R. Clarke, 97:526

Indicators of plant species richness in AVIRIS spectra of a mesic grassland, G.A. Carter, A.K. Knapp, J.E. Anderson, G.A. Hoch and M.D. Smith, 98:304

Surface mineral mapping at Steamboat Springs, Nevada, USA, with multi-wavelength thermal infrared images, R.G. Vaughan, S.J. Hook, W.M. Calvin and J.V. Taranik, 99:140

Optimal field sampling for targeting minerals using hyperspectral data, P. Debba, F.J.A. van Ruitenbeek, F.D. van der Meer, E.J.M. Carranza and A. Stein, 99:373

Hyperspectral imagery

Hyperspectral data processing for repeat detection of small infestations of leafy spurge, N.F. Glenn, J.T. Mundt, K.T. Weber, T.S. Prather, L.W. Lass and J. Pettingill, 95:399

Hyperspectral remote sensing

Discrimination of sugarcane varieties in Southeastern Brazil with EO-1 Hyperion data, L.S. Galvão, A.R. Formaggio and D.A. Tisot, 94:523

Using AVIRIS to assess hemlock abundance and early decline in the Catskills, New York, J. Pontius, R. Hallett and M. Martin, 97:163

Substrate age and precipitation effects on Hawaiian forest canopies from spaceborne imaging spectroscopy, G.P. Asner, K.M. Carlson and R.E. Martin, 98:457

Assessing vineyard condition with hyperspectral indices: Leaf and canopy reflectance simulation in a row-structured discontinuous canopy, P.J. Zarco-Tejada, A. Berjón, R. López-Lozano, J.R. Miller, P. Martin, V. Cachorro, M.R. González and A. de Frutos, 99:271

Hyperspectral sensors

Hyperspectral discrimination of tropical rain forest tree species at leaf to crown scales, M.L. Clark, D.A. Roberts and D.B. Clark, 96:375

Accuracy assessment

Detection of red attack stage mountain pine beetle infestation with high spatial resolution satellite imagery, J.C. White, M.A. Wulder, D. Brooks, R. Reich and R.D. Wheate, 96:340

Ice caps

ENVISAT radar altimeter measurements over continental surfaces and ice caps using the ICE-2 retracking algorithm, B. Legresy, F. Papa, F. Remy, G. Vinay, M. van den Bosch and O.-Z. Zanife, 95:150

Ice sheets

Detecting and measuring new snow accumulation on ice sheets by satellite remote sensing, R. Bindshadler, H. Choi, C. Shuman and T. Markus, 98:388

Iceberg flux

Computer-based identification and tracking of Antarctic icebergs in SAR images, T.A.M. Silva and G.R. Bigg, 94:287

Iceberg identification

Computer-based identification and tracking of Antarctic icebergs in SAR images, T.A.M. Silva and G.R. Bigg, 94:287

Iceberg tracking

Computer-based identification and tracking of Antarctic icebergs in SAR images, T.A.M. Silva and G.R. Bigg, 94:287

ICESat

Detecting and measuring new snow accumulation on ice sheets by satellite remote sensing, R. Bindshadler, H. Choi, C. Shuman and T. Markus, 98:388

IKONOS

Detection of shallow subtidal corals from IKONOS satellite and QTC View (50, 200 kHz) single-beam sonar data (Arabian Gulf; Dubai, UAE), B.M. Riegl and S.J. Purkis, 95:96

Spectral mixture analysis for subpixel vegetation fractions in the urban environment: How to incorporate endmember variability?, C. Song, 95:248

Detection of red attack stage mountain pine beetle infestation with high spatial resolution satellite imagery, J.C. White, M.A. Wulder, D. Brooks, R. Reich and R.D. Wheate, 96:340

Shadow allometry: Estimating tree structural parameters using hyperspatial image analysis, J.A. Greenberg, S.Z. Dobrowski and S.L. Ustin, 97:15

Image-based

Image-based atmospheric correction of QuickBird imagery of Minnesota cropland, J. Wu, D. Wang and M.E. Bauer, 99:315

Image classification

Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns, E.J. Laurent, H. Shi, D. Gatzolis, J.P. LeBouton, M.B. Walters and J. Liu, 97:249

Image features

Performance of different spectral and textural aerial photograph features in multi-source forest inventory, S. Tuominen and A. Pekkarinen, 94:256

Image masking

Image masking for crop yield forecasting using AVHRR NDVI time series imagery, J.H. Kastens, T.L. Kastens, D.L.A. Kastens, K.P. Price, E.A. Martinko and R.-Y. Lee, 99:341

Image matching

Combination of SRTM3 and repeat ASTER data for deriving alpine glacier flow velocities in the Bhutan Himalaya, A. Kääb, 94:463

Image segmentation

Computer-based identification and tracking of Antarctic icebergs in SAR images, T.A.M. Silva and G.R. Bigg, 94:287

Satellite remote sensing classification of thaw lakes and drained thaw lake basins on the North Slope of Alaska, R.C. Frohn, K.M. Hinkel and W.R. Eisner, 97:116

Image texture

Performance of different spectral and textural aerial photograph features in multi-source forest inventory, S. Tuominen and A. Pekkarinen, 94:256

Imaging spectroscopy

Remote sensing of forest biophysical variables using HyMap imaging spectrometer data, M. Schlerf, C. Atzberger and J. Hill, 95:177

Mapping microphytobenthos biomass by non-linear inversion of visible-infrared hyperspectral images, J.-P. Combe, P. Launeau, V. Carrère, D. Despan, V. Méléder, L. Barillé and C. Sotin, 98:371

Impervious surface

Assessments of urban growth in the Tampa Bay watershed using remote sensing data, G. Xian and M. Crane, 97:203

Improvements

Improvements of the MODIS terrestrial gross and net primary production global data set, M. Zhao, F.A. Heinsch, R.R. Nemani and S.W. Running, 95:164

Individual tree crown classification

Hyperspectral discrimination of tropical rain forest tree species at leaf to crown scales, M.L. Clark, D.A. Roberts and D.B. Clark, 96:375

In-stream habitat

Effects of channel morphology and sensor spatial resolution on image-derived depth estimates, C.J. Legleiter and D.A. Roberts, 95:231

Indian Ocean

Characteristics of atmospheric divergence and convergence in the Indian Ocean inferred from scatterometer winds, A.J. Luis and P.C. Pandey, 97:231

Individual tree crown

Automated tree recognition in old growth conifer stands with high resolution digital imagery, D.G. Leckie, F.A. Gougeon, S. Tinis, T. Nelson, C.N. Burnett and D. Paradine, 94:311

Inferential approach

The use of Remote Sensing techniques and empirical tectonic models for inference of geological structures: Bridging from regional to local scales, P.C. Fernandes da Silva, J.C. Cripps and S.M. Wise, 96:18

Infrared imagery

Mapping variations in weight percent silica measured from multispectral thermal infrared imagery—Examples from the Hiller Mountains, Nevada, USA and Tres Virgenes-La Reforma, Baja California Sur, Mexico, S.J. Hook, J.E. Dmochowski, K.A. Howard, L.C. Rowan, K.E. Karlstrom and J.M. Stock, 95:273

Infrared passive remote sensing

Comparison of active and passive water vapor remote sensing from space: An analysis based on the simulated performance of IASI and space borne differential absorption lidar, V. Wulfmeyer, H. Bauer, P. Di Girolamo and C. Lawrence, 95:211

Input signal noise

Operational algorithm for the retrieval of water quality in the Great Lakes, D. Pozdnyakov, R. Shuchman, A. Korosov and C. Hatt, 97:352

InSAR

Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments, G. Metternicht, L. Humi and R. Gogu, 98:284

Inter-annual variability

Identifying land cover variability distinct from land cover change: Cheatgrass in the Great Basin, B.A. Bradley and J.F. Mustard, 94:204

A data mining approach for understanding topographic control on climate-induced inter-annual vegetation variability over the United States, A.B. White, P. Kumar and D. Tcheng, 98:1

Intercalibration

Extension of retrospective datasets using multiple sensors. An approach to radiometric intercalibration of Landsat TM and MSS data, A. Röder, T. Kuemmerle and J. Hill, 95:195

Interferometric height

Carbon budget estimation in Central Amazonia: Successional forest modeling from remote sensing data, T. Neeff, P.M. de Alencastro Graça, L.V. Dutra and C. da Costa Freitas, 94:508

Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height, T. Neeff, G.S. Biging, L.V. Dutra, C.C. Freitas and J.R. dos Santos, 97:484

Interferometric radar

Quality of TOPSAR topographic data for volcanology studies at Kilauea Volcano, Hawaii: An assessment using airborne lidar data, P.J. Mougins-Mark and H. Garbeil, 96:149

Interpolation

Extension of retrospective datasets using multiple sensors. An approach to radiometric intercalibration of Landsat TM and MSS data, A. Röder, T. Kuemmerle and J. Hill, 95:195

Invasive species

Identifying land cover variability distinct from land cover change: Cheatgrass in the Great Basin, B.A. Bradley and J.F. Mustard, 94:204

Inventory

Geographic variability in lidar predictions of forest stand structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:532

Inversion

New methodology for soil surface moisture estimation and its application to ENVISAT-ASAR multi-incidence data inversion, M. Zribi, N. Baghdadi, N. Holah and O. Fafin, 96:485

Irrigated areas

Ganges and Indus river basin land use/land cover (LULC) and irrigated area mapping using continuous streams of MODIS data, P.S. Thenkabail, M. Schull and H. Tural, 95:317

IRS data

Mapping dry/wet snow cover in the Indian Himalayas using IRS multispectral imagery, R.P. Gupta, U.K. Haritashya and P. Singh, 97:458

Juniperus monosperma

Spectral sensing of foliar water conditions in two co-occurring conifer species: *Pinus edulis* and *Juniperus monosperma*, H.C. Stimson, D.D. Breshears, S.L. Ustin and S.C. Kefauver, 96:108

K-function

Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height, T. Neeff, G.S. Biging, L.V. Dutra, C.C. Freitas and J.R. dos Santos, 97:484

Kalman filter

Flood monitoring over the Mackenzie River Basin using passive microwave data, M. Temimi, R. Leconte, F. Brissette and N. Chaouch, 98:344

Karenia brevis

Red tide detection and tracing using MODIS fluorescence data: A regional example in SW Florida coastal waters, C. Hu, F.E. Muller-Karger, C.(Judd) Taylor, K.L. Carder, C. Kelble, E. Johns and C.A. Heil, 97:311

Kilauea Volcano

Quality of TOPSAR topographic data for volcanology studies at Kilauea Volcano, Hawaii: An assessment using airborne lidar data, P.J. Mouginis-Mark and H. Garbeil, 96:149

Knowledge-based systems

Analysis of convergent evidence in an evidential reasoning knowledge-based classification, Y. Cohen and M. Shoshany, 96:518

Kocaeli-Izmit

Assessing the potential of thermal infrared satellite surveys for monitoring seismically active areas: The case of Kocaeli (Izmit) earthquake, August 17, 1999, V. Tramutoli, V. Cuomo, C. Filizola, N. Pergola and C. Pietrapertosa, 96:409

Kriging

Comparison of regression and geostatistical methods for mapping Leaf Area Index (LAI) with Landsat ETM+ data over a boreal forest, M. Berterretche, A.T. Hudak, W.B. Cohen, T.K. Maersperger, S.T. Gower and J. Dungan, 96:49

Kurile islands

ASTER observations of thermal anomalies preceding the April 2003 eruption of Chikurachki volcano, Kurile Islands, Russia, D. Pieri and M. Abrams, 99:84

Kuusk-Nilson model

Retrieval of leaf area index for a coniferous forest by inverting a forest reflectance model, M. Rautiainen, 99:295

LAD

LAI retrieval from multiangular image classification and inversion of a ray tracing model, R. Casa and H.G. Jones, 98:414

LAI

On the relationship of NDVI with leaf area index in a deciduous forest site, Q. Wang, S. Adiku, J. Tenhunen and A. Granier, 94:244

Simple parameterizations of the radiation budget of uniform broadleaved and coniferous canopies, S. Smolander and P. Stenberg, 94:355

Remote sensing of forest biophysical variables using HyMap imaging spectrometer data, M. Schlerf, C. Atzberger and J. Hill, 95:177

Parametric (modified least squares) and non-parametric (Theil-Sen) linear regressions for predicting biophysical parameters in the presence of measurement errors, R. Fernandes and S. G. Leblanc, 95:303

Application of photon recollision probability in coniferous canopy reflectance simulations, M. Rautiainen and P. Stenberg, 96:98

Evaluation of seasonal variation of MODIS derived leaf area index at two European deciduous broadleaf forest sites, Q. Wang, J. Tenhunen, N.Q. Dinh, M. Reichstein, D. Otieno, A. Granier and K. Pilegaard, 96:475

Application of MODIS derived parameters for regional crop yield assessment, P.C. Doraiswamy, T.R. Sinclair, S. Hollinger, B. Akhmedov, A. Stern and J. Prueger, 97:192

Global mapping of foliage clumping index using multi-angular satellite data, J.M. Chen, C.H. Menges and S.G. Leblanc, 97:447

LAI retrieval from multiangular image classification and inversion of a ray tracing model, R. Casa and H.G. Jones, 98:414

Retrieval of leaf area index for a coniferous forest by inverting a forest reflectance model, M. Rautiainen, 99:295

Lake Michigan

Operational algorithm for the retrieval of water quality in the Great Lakes, D. Pozdnyakov, R. Shuchman, A. Korosov and C. Hatt, 97:352

Lake Tahoe

Characterizing partial upwellings and surface circulation at Lake Tahoe, California-Nevada, USA with thermal infrared images, T.E. Steissberg, S.J. Hook and S.G. Schladow, 99:2

Lake Tahoe Basin

Shadow allometry: Estimating tree structural parameters using hyperspatial image analysis, J.A. Greenberg, S.Z. Dobrowski and S.L. Ustin, 97:15

Lakes

Mapping lake CDOM by satellite remote sensing, T. Kutser, D.C. Pierson, K.Y. Kallio, A. Reinart and S. Sobek, 94:535

Stereo observation of lakes and coastal zones using ASTER imagery, J. Matthews, 99:16

Land cover (LULC)

Ganges and Indus river basin land use/land cover (LULC) and irrigated area mapping using continuous streams of MODIS data, P.S. Thenkabail, M. Schull and H. Tural, 95:317

Land cover change

Change detection with heterogeneous data using ecoregional stratification, statistical summaries and a land allocation algorithm, K.M. Bergen, D.G. Brown, J.F. Rutherford and E.J. Gustafson, 97:434

Land cover classification

Land cover classification and change analysis of the Twin Cities (Minnesota) Metropolitan Area by multitemporal Landsat remote sensing, F. Yuan, K.E. Sawaya, B.C. Loeffelholz and M.E. Bauer, 98:317

Assessment of ASTER land cover and MODIS NDVI data at multiple scales for ecological characterization of an arid urban center, W.L. Stefanov and M. Netzbund, 99:31

Land cover mapping

Super-resolution land cover mapping using a Markov random field based approach, T. Kasetkasem, M.K. Arora and P.K. Varshney, 96:302

Land cover monitoring

Land cover change detection at coarse spatial scales based on iterative estimation and previous state information, S. Le Hégarat-Masclé, C. Ottlé and C. Guérin, 95:464

Land subsidence/uplift

Mapping regional land displacements in the Venice coastland by an integrated monitoring system, P. Teatini, L. Tosi, T. Strozzi, L. Carbognin, U. Wegmüller and F. Rizzetto, 98:403

Land surface parameters monitoring

Land surface parameter monitoring with ERS scatterometer data over the Sahel: A comparison between agro-pastoral and pastoral areas, S. Zine, L. Jarlan, P.-L. Frison, E. Mougin, P. Hiernaux and J.-P. Rudant, 96:438

Land surface temperature

Ground measurements for the validation of land surface temperatures derived from AATSR and MODIS data, C. Coll, V. Caselles, J.M. Galve, E. Valor, R. Nicolòs, J.M. Sánchez and R. Rivas, 97:288

Land surface temperature (LST)

Separating surface emissivity and temperature using two-channel spectral indices and emissivity composites and comparison with a vegetation fraction method, P. Dash, F.-M. Göttsche, F.-S. Olesen and H. Fischer, 96:1

Land surface water index

Mapping paddy rice agriculture in southern China using multi-temporal MODIS images, X. Xiao, S. Boles, J. Liu, D. Zhuang, S. Frolking, C. Li, W. Salas and B. Moore III, 95:480

Land use

Carbon budget estimation in Central Amazonia: Successional forest modeling from remote sensing data, T. Neeff, P.M. de Alencastro Graça, L.V. Dutra and C. da Costa Freitas, 94:508

Ganges and Indus river basin land use/land cover (LULC) and irrigated area mapping using continuous streams of MODIS data, P.S. Thenkabail, M. Schull and H. Tural, 95:317

Spatial and temporal patterns of China's cropland during 1990-2000: An analysis based on Landsat TM data, J. Liu, M. Liu, H. Tian, D. Zhuang, Z. Zhang, W. Zhang, X. Tang and X. Deng, 98:442

Land use and land cover mapping

Land cover assessment with MODIS imagery in southern African Miombo ecosystems, F. Sedano, P. Gong and M. Ferrão, 98:429

Land use change

Carbon budget estimation in Central Amazonia: Successional forest modeling from remote sensing data, T. Neeff, P.M. de Alencastro Graça, L.V. Dutra and C. da Costa Freitas, 94:508

Land use dynamics

Carbon budget estimation in Central Amazonia: Successional forest modeling from remote sensing data, T. Neeff, P.M. de Alencastro Graça, L.V. Dutra and C. da Costa Freitas, 94:508

Land use/land cover change

Identifying land cover variability distinct from land cover change: Cheatgrass in the Great Basin, B.A. Bradley and J.F. Mustard, 94:204

Landform

Mapping North African landforms using continental scale unmixing of MODIS imagery, J.-A.C. Ballantine, G.S. Okin, D.E. Prentiss and D.A. Roberts, 97:470

Landform endmembers

Mapping North African landforms using continental scale unmixing of MODIS imagery, J.-A.C. Ballantine, G.S. Okin, D.E. Prentiss and D.A. Roberts, 97:470

Landsat

Extension of retrospective datasets using multiple sensors. An approach to radiometric intercalibration of Landsat TM and MSS data, A. Röder, T. Kuemmerle and J. Hill, 95:195

Spectral mixture analysis for subpixel vegetation fractions in the urban environment: How to incorporate endmember variability?, C. Song, 95:248

Glacial cover mapping (1987-1996) of the Cordillera Blanca (Peru) using satellite imagery, W. Silverio and J.-M. Jaquet, 95:342

Landsat-7 ETM+ radiometric normalization comparison for northern mapping applications, I. Olthof, D. Pouliot, R. Fernandes and R. Latifovic, 95:388

Combining lidar estimates of aboveground biomass and Landsat estimates of stand age for spatially extensive validation of modeled forest productivity, M.A. Lefsky, D.P. Turner, M. Guzy and W.B. Cohen, 95:549

Spatial analysis of global urban extent from DMSP-OLS night lights, C. Small, F. Pozzi and C.D. Elvidge, 96:277

Evaluation of remotely sensed indices for assessing burn severity in interior Alaska using Landsat TM and ETM+, J. Epting, D. Verbyla and B. Sorbel, 96:328

Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns, E.J. Laurent, H. Shi, D. Gatzolis, J.P. LeBouton, M.B. Walters and J. Liu, 97:249

Comparison of Tasseled Cap-based Landsat data structures for use in forest disturbance detection, S.P. Healey, W.B. Cohen, Y. Zhiqiang and O.N. Krankina, 97:301

Retrospective seagrass change detection in a shallow coastal tidal Australian lake, A.G. Dekker, V.E. Brando and J.M. Anstee, 97:415

Vegetation water content estimation for corn and soybeans using spectral indices derived from MODIS near- and short-wave infrared bands, D. Chen, J. Huang and T.J. Jackson, 98:225

A comparison of methods for estimating fractional green vegetation cover within a desert-to-upland transition zone in central New Mexico, USA, J. Xiao and A. Moody, 98:237

Land cover classification and change analysis of the Twin Cities (Minnesota) Metropolitan Area by multitemporal Landsat remote sensing, F. Yuan, K.E. Sawaya, B.C. Loeffelholz and M.E. Bauer, 98:317

Landsat ETM+

Comparison of burned area estimates derived from SPOT-VEGETATION and Landsat ETM+ data in Africa: Influence of spatial pattern and vegetation type, J.M.N. Silva, A.C.L. Sá and J.M.C. Pereira, 96:188

Evaluation of remotely sensed indices for assessing burn severity in interior Alaska using Landsat TM and ETM+, J. Epting, D. Verbyla and B. Sorbel, 96:328

Classification of Amazonian primary rain forest vegetation using Landsat ETM+ satellite imagery, K.J. Salovaara, S. Thessler, R.N. Malik and H. Tuomisto, 97:39

Characterizing partial upwellings and surface circulation at Lake Tahoe, California-Nevada, USA with thermal infrared images, T.E. Steissberg, S.J. Hook and S.G. Schladow, 99:2

Landsat TM

Evaluation of remotely sensed indices for assessing burn severity in interior Alaska using Landsat TM and ETM+, J. Epting, D. Verbyla and B. Sorbel, 96:328

Landscape detection

A simple and effective radiometric correction method to improve landscape change detection across sensors and across time, X. Chen, L. Vierling and D. Deering, 98:63

Landscape metrics

Assessment of ASTER land cover and MODIS NDVI data at multiple scales for ecological characterization of an arid urban center, W.L. Stefanov and M. Netzband, 99:31

Landslides

Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments, G. Metternicht, L. Humi and R. Gogu, 98:284

Large-scale biosphere-atmosphere experiment in Amazonia

Field work and statistical analyses for enhanced interpretation of satellite fire data, M.F. Cardoso, G.C. Hurr, B. Moore III, C.A. Nobre and H. Bain, 96:212

Laser

Patterns of covariance between forest stand and canopy structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:517

Geographic variability in lidar predictions of forest stand structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:532

Laser altimetry

Airborne laser scanning for riverbank erosion assessment, D.P. Thoma, S.C. Gupta, M.E. Bauer and C.E. Kirchoff, 95:493

Mapping forest structure for wildlife habitat analysis using waveform lidar: Validation of montane ecosystems, P. Hyde, R. Dubayah, B. Peterson, J.B. Blair, M. Hofton, C. Hunsaker, R. Knox and W. Walker, 96:427

Laser scanning

Comparing regression methods in estimation of biophysical properties of forest stands from two different inventories using laser scanner data, E. Næsset, O.M. Bollandsas and T. Gobakken, 94:541

Estimating forest growth using canopy metrics derived from airborne laser scanner data, E. Næsset and T. Gobakken, 96:453

Assessing sensor effects and effects of leaf-off and leaf-on canopy conditions on biophysical stand properties derived from small-footprint airborne laser data, E. Næsset, 98:356

Latent heat flux

Retrieval of evapotranspiration over the Alpilles/ReSeDA experimental site using airborne POLDER sensor and a thermal camera, M. Gómez, A. Olioso, J.A. Sobrino and F. Jacob, 96:399

LBA

Field work and statistical analyses for enhanced interpretation of satellite fire data, M.F. Cardoso, G.C. Hurr, B. Moore III, C.A. Nobre and H. Bain, 96:212

Leaf area index

Use of coupled canopy structure dynamic and radiative transfer models to estimate biophysical canopy characteristics, B. Koetz, F. Baret, H. Poilvé and J. Hill, 95:115

Application of photon recollision probability in coniferous canopy reflectance simulations, M. Rautiainen and P. Stenberg, 96:98

The effects of aggregated land cover data on estimating NPP in northern Wisconsin, D.E. Ahl, S.T. Gower, D.S. Mackay, S.N. Burrows, J.M. Norman and G.R. Diak, 97:1

A simple and effective radiometric correction method to improve landscape change detection across sensors and across time, X. Chen, L. Vierling and D. Deering, 98:63

Leaf area index (LAI)

A hybrid inversion method for mapping leaf area index from MODIS data: experiments and application to broadleaf and needleleaf canopies, H. Fang and S. Liang, 94:405

Leaf optics

Leaf BRDF measurements and model for specular and diffuse components differentiation, L. Bousquet, S. Lachérade, S. Jacquemoud and I. Moya, 98:201

Leaf phenology

Satellite-based modeling of gross primary production in a seasonally moist tropical evergreen forest, X. Xiao, Q. Zhang, S. Saleska, L. Hutya, P. De Camargo, S. Wofsy, S. Frolking, S. Boles, M. Keller and B. Moore III, 94:105

Leafy spurge

Hyperspectral data processing for repeat detection of small infestations of leafy spurge, N.F. Glenn, J.T. Mundt, K.T. Weber, T.S. Prather, L.W. Lass and J. Pettingill, 95:399

Leveling

Mapping regional land displacements in the Venice coastland by an integrated monitoring system, P. Teatini, L. Tosi, T. Strozzi, L. Carbognin, U. Wegmüller and F. Rizzetto, 98:403

Lichen

Spectral unmixing of normalized reflectance data for the deconvolution of lichen and rock mixtures, J. Zhang, B. Rivard and A. Sánchez-Azofeifa, 95:57

A new index for mapping lichen-dominated biological soil crusts in desert areas, J. Chen, M. Yuan Zhang, L. Wang, H. Shimazaki and M. Tamura, 96:165

Lichen mapping

Mapping lichen in a caribou habitat of Northern Quebec, Canada, using an enhancement-classification method and spectral mixture analysis, J. Théau, D.R. Peddle and C.R. Duguay, 94:232

Lidar

Comparison of active and passive water vapor remote sensing from space: An analysis based on the simulated performance of IASI and space borne differential absorption lidar, V. Wulfmeyer, H. Bauer, P. Di Girolamo and C. Serio, 95:211

Patterns of covariance between forest stand and canopy structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:517

Geographic variability in lidar predictions of forest stand structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:532

Quality of TOPSAR topographic data for volcanology studies at Kilauea Volcano, Hawaii: An assessment using airborne lidar data, P.J. Mouginis-Mark and H. Garbeil, 96:149

Mapping forest structure for wildlife habitat analysis using waveform lidar: Validation of montane ecosystems, P. Hyde, R. Dubayah, B. Peterson, J.B. Blair, M. Hofton, C. Hunsaker, R. Knox and W. Walker, 96:427

LIDAR

Global biomass mapping for an improved understanding of the CO₂ balance—the Earth observation mission Carbon-3D, S. Hese, W. Lucht, C. Schmullius, M. Barnsley, R. Dubayah, D. Knorr, K. Neumann, T. Riedel and K. Schröter, 94:94

Airborne laser scanning for riverbank erosion assessment, D.P. Thoma, S.C. Gupta, M.E. Bauer and C.E. Kirchoff, 95:493

Mapping forest structure for wildlife habitat analysis using waveform lidar: Validation of montane ecosystems, P. Hyde, R. Dubayah, B. Peterson, J.B. Blair, M. Hofton, C. Hunsaker, R. Knox and W. Walker, 96:427

Towards operational monitoring of a northern wetland using geomatics-based techniques, J. Töyrä and A. Pietroniro, 97:174

LiDAR

Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments, G. Metternicht, L. Humi and R. Gogu, 98:284

Lidar estimates

Combining lidar estimates of aboveground biomass and Landsat estimates of stand age for spatially extensive validation of modeled forest productivity, M.A. Lefsky, D.P. Turner, M. Guzy and W.B. Cohen, 95:549

Light use efficiency

The effects of aggregated land cover data on estimating NPP in northern Wisconsin, D.E. Ahl, S.T. Gower, D.S. Mackay, S.N. Burrows, J.M. Norman and G.R. Diak, 97:1

A MODIS-derived photochemical reflectance index to detect inter-annual variations in the photosynthetic light-use efficiency of a boreal deciduous forest, G.G. Drolet, K.F. Huemmrich, F.G. Hall, E.M. Middleton, T.A. Black, A.G. Barr and H.A. Margolis, 98:212

Light-use efficiency

The relative importance of light-use efficiency modifications from environmental conditions and cultivation for estimation of large-scale net primary productivity, J.B. Bradford, J.A. Hicke and W.K. Lauenroth, 96:246

Line process

A contextual classification scheme based on MRF model with improved parameter estimation and multiscale fuzzy line process, B. Tso and R.C. Olsen, 97:127

Lineament

Application of wavelet analysis to the study of spatial pattern of morphotectonic lineaments in digital terrain models. A case study, G. Jordan and B. Schott, 94:31

Linear and non-linear spectral unmixing

Testing the potential of multi-spectral remote sensing for retrospectively estimating fire severity in African Savannahs, A.M.S. Smith, M.J. Wooster, N.A. Drake, F.M. Dipotso, M.J. Falkowski and A.T. Hudak, 97:92

Linear discriminant analysis

Hyperspectral discrimination of tropical rain forest tree species at leaf to crown scales, M.L. Clark, D.A. Roberts and D.B. Clark, 96:375

Liquid water index

Satellite-based modeling of gross primary production in a seasonally moist tropical evergreen forest, X. Xiao, Q. Zhang, S. Saleska, L. Hutya, P. De Camargo, S. Wofsy, S. Frolking, S. Boles, M. Keller and B. Moore III, 94:105

Lithologic mapping

Lithologic mapping of the Mordor, NT, Australia ultramafic complex by using the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER), L.C. Rowan, J.C. Mars and C.J. Simpson, 99:105

Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared "radiance-at-sensor" data, Y. Ninomiya, B. Fu and T.J. Cudahy, 99:127

Little Ice Age

Analysis of plant colonization on an arctic moraine since the end of the Little Ice Age using remotely sensed data and a Bayesian approach, M. Moreau, D. Laffly, D. Joly and T. Brossard, 99:244

Local maximum filtering

Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height, T. Neeff, G.S. Biging, L.V. Dutra, C.C. Freitas and J.R. dos Santos, 97:484

Low-resolution bias

Spatiotemporal problems with detecting and mapping mosaic fire regimes with coarse-resolution satellite data in savanna environments, P.S. Laris, 99:412

LST

Predicting riparian evapotranspiration from MODIS vegetation indices and meteorological data, P.L. Nagler, J. Cleverly, E. Glenn, D. Lampkin, A. Huete and Z. Wan, 94:17

LUT

Application of MODIS derived parameters for regional crop yield assessment, P.C. Doraiswamy, T.R. Sinclair, S. Hollinger, B. Akhmedov, A. Stern and J. Prueger, 97:192

LVIS

Mapping forest structure for wildlife habitat analysis using waveform lidar: Validation of montane ecosystems, P. Hyde, R. Dubayah, B. Peterson, J.B. Blair, M. Hofton, C. Hunsaker, R. Knox and W. Walker, 96:427

Madagascar

Mapping tropical forest structure in southeastern Madagascar using remote sensing and artificial neural networks, J.C. Ingram, T.P. Dawson and R.J. Whittaker, 94:491

Mafic

Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared "radiance-at-sensor" data, Y. Ninomiya, B. Fu and T.J. Cudahy, 99:127

Maize

Use of coupled canopy structure dynamic and radiative transfer models to estimate biophysical canopy characteristics, Be. Koetz, F. Baret, H. Poilvé and J. Hill, 95:115

Manual detection

Oil spill detection by satellite remote sensing, C. Brekke and A.H.S. Solberg, 95:1

MAP classifier

Super-resolution land cover mapping using a Markov random field based approach, T. Kasetkasem, M.K. Arora and P.K. Varshney, 96:302

Mapping

Estimating forest canopy fuel parameters using LIDAR data, H.-E. Andersen, R.J. McGaughey and S.E. Reutebuch, 94:441

Mapping PAR using MODIS atmosphere products, P.E. Van Laake and G.A. Sanchez-Azofeifa, 94:554

Characterisation of surface roughness and sediment texture of intertidal flats using ERS SAR imagery, D. van der Wal, P.M.J. Herman and A. Wielemaker-van den Dool, 98:96

Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments, G. Metternicht, L. Humi and R. Gogu, 98:284

Mapping microphytobenthos biomass by non-linear inversion of visible-infrared hyperspectral images, J.-P. Combe, P. Launeau, V. Carrère, D. Despan, V. Méléder, L. Barillé and C. Sotin, 98:371

Optimization of sampling schemes for vegetation mapping using fuzzy classification, R. Tapia, A. Stein and W. Bijker, 99:425

Markov Chain Monte Carlo (MCMC) method

Estimating light absorption by chlorophyll, leaf and canopy in a deciduous broadleaf forest using MODIS data and a radiative transfer model, Q. Zhang, X. Xiao, B. Braswell, E. Linder, F. Baret and B. Moore III, 99:357

Markov process

Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height, T. Neeff, G.S. Biging, L.V. Dutra, C.C. Freitas and J.R. dos Santos, 97:484

Markov random fields

Super-resolution land cover mapping using a Markov random field based approach, T. Kasetkasem, M.K. Arora and P.K. Varshney, 96:302

Mass movement (MM)

Detecting major terrain parameters relating to mass movements' occurrence using GIS, remote sensing and statistical correlations, case study Lebanon, C. Abdallah, J. Chorowicz, R. Bou Kheir and M. Khawlie, 99:448

Maximum likelihood

Hyperspectral discrimination of tropical rain forest tree species at leaf to crown scales, M.L. Clark, D.A. Roberts and D.B. Clark, 96:375

On the relationship between training sample size and data dimensionality: Monte Carlo analysis of broadband multi-temporal classification, T.G. Van Niel, T.R. McVicar and B. Datt, 98:468

Meadow

A local-scale, high-resolution evapotranspiration mapping algorithm (ETMA) with hydroecological applications at riparian meadow restoration sites, S.P. Loheide II and S.M. Gorelick, 98:182

Mean square error

Comparing estimators of gR. change derived from complete coverage mapping versus statistical sampling of remotely sensed data, S.V. Stehman, 96:466

Measurement errors

Parametric (modified least squares) and non-parametric (Theil-Sen) linear regressions for predicting biophysical parameters in the presence of measurement errors, R. Fernandes and S.G. Leblanc, 95:303

Measurement integration

Mapping regional land displacements in the Venice coastland by an integrated monitoring system, P. Teatini, L. Tosi, T. Strozzi, L. Carbognin, U. Wegmüller and F. Rizzetto, 98:403

Measurement model

Comparing estimators of gR. change derived from complete coverage mapping versus statistical sampling of remotely sensed data, S.V. Stehman, 96:466

Mediterranean region

Detecting major terrain parameters relating to mass movements' occurrence using GIS, remote sensing and statistical correlations, case study Lebanon, C. Abdallah, J. Chorowicz, R. Bou Kheir and M. Khawlie, 99:448

Meltwater

ASTER observations of thermal anomalies preceding the April 2003 eruption of Chikurachki volcano, Kurile Islands, Russia, D. Pieri and M. Abrams, 99:84

MERIS

Vicarious calibration of MERIS over dark waters in the near infrared, N. Martiny, R. Santer and I. Smolskaia, 94:475

MESMA

Mapping North African landforms using continental scale unmixing of MODIS imagery, J.-A.C. Ballantine, G.S. Okin, D.E. Prentiss and D.A. Roberts, 97:470

Multiple shadow fractions in spectral mixture analysis of a cotton canopy, G.J. Fitzgerald, P.J. Pinter Jr., D.J. Hunsaker and T.R. Clarke, 97:526

Meteosat

Assessing the potential of thermal infrared satellite surveys for monitoring seismically active areas: The case of Kocaeli (İzmit) earthquake, August 17, 1999, V. Tramutoli, V. Cuomo, C. Filizzola, N. Pergola and C. Pietrapertosa, 96:409

Metrosideros polymorpha

Substrate age and precipitation effects on Hawaiian forest canopies from spaceborne imaging spectroscopy, G.P. Asner, K.M. Carlson and R.E. Martin, 98:457

Michigan

Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns, E.J. Laurent, H. Shi, D. Gatzliolis, J.P. LeBouton, M.B. Walters and J. Liu, 97:249

Microphytobenthos

Mapping microphytobenthos biomass by non-linear inversion of visible-infrared hyperspectral images, J.-P. Combe, P. Launeau, V. Carrère, D. Despan, V. Méléder, L. Barillé and C. Sotin, 98:371

Microwave

Multi-temporal JERS SAR data in boreal forest biomass mapping, Y. Rauste, 97:263

Microwave emission

Detecting and measuring new snow accumulation on ice sheets by satellite remote sensing, R. Bindshadler, H. Choi, C. Shuman and T. Markus, 98:388

Microwave radiometry

Comparison between the interannual variability of snow parameters derived from SSM/I and the Ob river discharge, M. Grippa, N. Mognard and T. Le Toan, 98:35

Mid-infrared

Extending surface temperature and emissivity retrieval to the mid-infrared (3-5 μm) using the Multispectral Thermal Imager (MTI), Amit Mushkin, L.K. Balick and A.R. Gillespie, 98:141

Midre Lovénbreen fore field

Analysis of plant colonization on an arctic moraine since the end of the Little Ice Age using remotely sensed data and a Bayesian approach, M. Moreau, D. Laffly, D. Joly and T. Brossard, 99:244

Midwest USA

Change detection with heterogeneous data using ecoregional stratification, statistical summaries and a land allocation algorithm, K.M. Bergen, D.G. Brown, J.F. Rutherford and E.J. Gustafson, 97:434

Mineral

Spectral unmixing of normalized reflectance data for the deconvolution of lichen and rock mixtures, J. Zhang, B. Rivard and A. Sánchez-Azofeifa, 95:57

Mineral mapping

Surface mineral mapping at Steamboat Springs, Nevada, USA, with multi-wavelength thermal infrared images, R.G. Vaughan, S.J. Hook, W.M. Calvin and J.V. Taranik, 99:140

Mineral mapping on the Chilean-Bolivian Altiplano using co-orbital ALI, ASTER and Hyperion images: Data dimensionality issues and solutions, B.E. Hubbard and J.K. Crowley, 99:173

Mineralogic indices

Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared "radiance-at-sensor" data, Y. Ninomiya, B. Fu and T.J. Cudahy, 99:127

Minerals

Optimal field sampling for targeting minerals using hyperspectral data, P. Debba, F.J.A. van Ruitenbeek, F.D. van der Meer, E.J.M. Carranza and A. Stein, 99:373

MISR

The value of multiangle measurements for retrieving structurally and radiatively consistent properties of clouds, aerosols, and surfaces, D.J. Diner, B.H. Braswell, R. Davies, N. Gobron, J. Hu, Y. Jin, R.A. Kahn, Y. Knyazikhin, N. Loeb, J.-P. Muller, A.W. Nolin, B. Pinty, C.B. Schaaf, G. Seiz and J. Stroeve, 97:495

MISR aerosol and surface retrieval

Using angular and spectral shape similarity constraints to improve MISR aerosol and surface retrievals over land, D.J. Diner, J.V. Martonchik, R.A. Kahn, B. Pinty, N. Gobron, D.L. Nelson and B.N. Holben, 94:155

Mixture model

Comparison of non-linear mixture models: sub-pixel classification, W. Liu and E.Y. Wu, 94:145

Mixture Tuned Matched Filtering

Hyperspectral data processing for repeat detection of small infestations of leafy spurge, N.F. Glenn, J.T. Mundt, K.T. Weber, T.S. Prather, L.W. Lass and J. Pettingill, 95:399

Discrimination of hoary cress and determination of its detection limits via hyperspectral image processing and accuracy assessment techniques, J.T. Mundt, N.F. Glenn, K.T. Weber, T.S. Prather, L.W. Lass and J. Pettingill, 96:509

Using AVIRIS to assess hemlock abundance and early decline in the Catskills, New York, J. Pontius, R. Hallett and M. Martin, 97:163

MLP

Comparison of non-linear mixture models: sub-pixel classification, W. Liu and E.Y. Wu, 94:145

Model

Assessments of urban growth in the Tampa Bay watershed using remote sensing data, G. Xian and M. Crane, 97:203

Leaf BRDF measurements and model for specular and diffuse components differentiation, L. Bousquet, S. Lachérade, S. Jacquemoud and I. Moya, 98:201

Model inversion

LAI retrieval from multiangular image classification and inversion of a ray tracing model, R. Casa and H.G. Jones, 98:414

Moderate Resolution Imaging Spectroradiometer

Statistical evaluation of remotely sensed snow-cover products with constraints from streamflow and SNOTEL measurements, X. Zhou, H. Xie and J.M.H. Hendrickx, 94:214

Modified Gaussian Model

Mapping microphytobenthos biomass by non-linear inversion of visible-infrared hyperspectral images, J.-P. Combe, P. Launeau, V. Carrère, D. Despan, V. Méléder, L. Barillé and C. Sotin, 98:371

MODIS

Predicting riparian evapotranspiration from MODIS vegetation indices and meteorological data, P.L. Nagler, J. Cleverly, E. Glenn, D. Lampkin, A. Huete and Z. Wan, 94:17

Accuracy assessment of the MODIS 16-day albedo product for snow: comparisons with Greenland in situ measurements, J. Stroeve, J.E. Box, F. Gao, S. Liang, A. Nolin and C. Schaaf, 94:46

Quality assessment and improvement of temporally composited products of remotely sensed imagery by combination of VEGETATION 1 and 2 images, O. Hagolle, A. Lobo, P. Maisongrande, F. Cabot, B. Duchemin and A. De Pereyra, 94:172

Aerosol optical thickness determination by exploiting the synergy of TERRA and AQUA MODIS, J. Tang, Y. Xue, T. Yu and Y. Guan, 94:327

A hybrid inversion method for mapping leaf area index from MODIS data: experiments and application to broadleaf and needleleaf canopies, H. Fang and S. Liang, 94:405

Consistent merging of satellite ocean color data sets using a bio-optical model, S. Maritorena and D.A. Siegel, 94:429

Assessment of multitemporal compositing techniques of MODIS and AVHRR images for burned land mapping, E. Chuvieco, G. Ventura, M.P. Martín and I. Gómez, 94:450

Mapping PAR using MODIS atmosphere products, P.E. Van Laake and G.A. Sanchez-Azofeifa, 94:554

Accuracy assessment of sea-ice concentrations from MODIS using in-situ measurements, C. Drüe and G. Heinemann, 95:139

Improvements of the MODIS terrestrial gross and net primary production global data set, M. Zhao, F.A. Heinsch, R.R. Nemani and S.W. Running, 95:164

Ganges and Indus river basin land use/land cover (LULC) and irrigated area mapping using continuous streams of MODIS data, P.S. Thenkabail, M. Schull and H. Tural, 95:317

A new GLM-based method for mapping tree cover continuous fields using regional MODIS reflectance data, M. Schwarz and N.E. Zimmermann, 95:428

Assessing the potential of SeaWiFS and MODIS for estimating chlorophyll concentration in turbid productive waters using red and near-infrared bands, G. Dall'Olmo, A.A. Gitelson, D.C. Rundquist, B. Leavitt, T. Barrow and J.C. Holz, 96:176

A crop phenology detection method using time-series MODIS data, T. Sakamoto, M. Yokozawa, H. Toritani, M. Shibayama, N. Ishitsuka and H. Ohno, 96:366

Evaluation of seasonal variation of MODIS derived leaf area index at two European deciduous broadleaf forest sites, Q. Wang, J. Tenhunen, N.Q. Dinh, M. Reichstein, D. Otieno, A. Granier and K. Pilegard, 96:475

Estimation of the net radiation using MODIS (Moderate Resolution Imaging Spectroradiometer) data for clear sky days, G. Bisht, V. Venturini, S. Islam and L. Jiang, 97:52

Prototyping a global algorithm for systematic fire-affected area mapping using MODIS time series data, D.P. Roy, Y. Jin, P.E. Lewis and C.O. Justice, 97:137

Using MODIS snow cover maps in modeling snowmelt runoff process in the eastern part of Turkey, A. Emre Tekeli, Z. Akyürek, A. Arda Şorman, A. Şensoy and A. Ünal Şorman, 97:216

Ground measurements for the validation of land surface temperatures derived from AATSR and MODIS data, C. Coll, V. Caselles, J.M. Galve, E. Valor, R. Niclòs, J.M. Sánchez and R. Rivas, 97:288

Red tide detection and tracing using MODIS fluorescence data: A regional example in SW Florida coastal waters, C. Hu, F.E. Muller-Karger, C.(Judd) Taylor, K.L. Carder, C. Kelble, E. Johns and C.A. Heil, 97:311

Evapotranspiration on western U.S. rivers estimated using the Enhanced Vegetation Index from MODIS and data from eddy covariance and Bowen ratio flux towers, P.L. Nagler, R.L. Scott, C. Westenberg, J.R. Cleverly, E.P. Glenn and A.R. Huete, 97:337

Operational algorithm for the retrieval of water quality in the Great Lakes, D. Pozdnyakov, R. Shuchman, A. Korosov and C. Hatt, 97:352

- The value of multiangle measurements for retrieving structurally and radiatively consistent properties of clouds, aerosols, and surfaces, D.J. Diner, B.H. Braswell, R. Davies, N. Gobron, J. Hu, Y. Jin, R.A. Kahn, Y. Knyazikhin, N. Loeb, J.-P. Muller, A.W. Nolin, B. Pinty, C.B. Schaaf, G. Seiz and J. Stroeve, 97:495
- An improved in-situ bio-optical data set for ocean color algorithm development and satellite data product validation, P.J. Werdell and S.W. Bailey, 98:122
- A MODIS-derived photochemical reflectance index to detect inter-annual variations in the photosynthetic light-use efficiency of a boreal deciduous forest, G.G. Drolet, K.F. Huemmrich, F.G. Hall, E.M. Middleton, T. A. Black, A.G. Barr and H.A. Margolis, 98:212
- Vegetation water content estimation for corn and soybeans using spectral indices derived from MODIS near- and short-wave infrared bands, D. Chen, J. Huang and T.J. Jackson, 98:225
- Land cover assessment with MODIS imagery in southern African Miombo ecosystems, F. Sedano, P. Gong and M. Ferrão, 98:429
- Characterizing partial upwellings and surface circulation at Lake Tahoe, California-Nevada, USA with thermal infrared images, T.E. Steissberg, S.J. Hook and S.G. Schladow, 99:2
- Assessment of ASTER land cover and MODIS NDVI data at multiple scales for ecological characterization of an arid urban center, W.L. Stefanov and M. Netzbund, 99:31
- Multi-platform comparisons of MODIS and AVHRR normalized difference vegetation index data, K. Gallo, L. Ji, B. Reed, J. Eidenshink and J. Dwyer, 99:221
- Estimating light absorption by chlorophyll, leaf and canopy in a deciduous broadleaf forest using MODIS data and a radiative transfer model, Q. Zhang, X. Xiao, B. Braswell, E. Linder, F. Baret and B. Moore III, 99:357
- MODIS time-series imagery for forest disturbance detection and quantification of patch size effects, S. Jin and S.A. Sader, 99:462
- MODIS application**
- Application of MODIS derived parameters for regional crop yield assessment, P.C. Doraiswamy, T.R. Sinclair, S. Hollinger, B. Akhmedov, A. Stern and J. Prueger, 97:192
- MODIS images**
- Mapping paddy rice agriculture in southern China using multi-temporal MODIS images, X. Xiao, S. Boles, J. Liu, D. Zhuang, S. Frolking, C. Li, W. Salas and B. Moore III, 95:480
- MODIS measurement**
- Influence of lake morphology and clarity on water surface temperature as measured by EOS ASTER, M.W. Becker and A. Daw, 99:288
- MODIS NDVI**
- On the relationship of NDVI with leaf area index in a deciduous forest site, Q. Wang, S. Adiku, J. Tenhunen and A. Granier, 94:244
- MODIS/ASTER Airborne Simulator (MASTER)**
- Mapping variations in weight percent silica measured from multispectral thermal infrared imagery—Examples from the Hiller Mountains, Nevada, USA and Tres Virgenes-La Reforma, Baja California Sur, Mexico, S.J. Hook, J.E. Dmochowski, K.A. Howard, L.C. Rowan, K.E. Karlstrom and J.M. Stock, 95:273
- MODIS-LAI**
- Estimation of net primary productivity by integrating remote sensing data with an ecosystem model, M.K. Hazarika, Y. Yasuoka, A. Ito and D. Dye, 94:298
- Moisture**
- Detecting near-surface moisture stress in *Sphagnum* spp., A. Harris, R.G. Bryant and A.J. Baird, 97:371
- Monitoring**
- Towards operational monitoring of a northern wetland using geomatics-based techniques, J. Töyrä and A. Pietroniro, 97:174
- Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments, G. Metternicht, L. Hurni and R. Gogu, 98:284
- Monsoons**
- Characteristics of atmospheric divergence and convergence in the Indian Ocean inferred from scatterometer winds, A.J. Luis and P.C. Pandey, 97:231
- MOPITT**
- Satellite mapping of CO emission from forest fires in Northwest America using MOPITT measurements, J. Liu, J.R. Drummond, Q. Li, J.C. Gille and D.C. Ziskin, 95:502
- Mordor Australia**
- Lithologic mapping of the Mordor, NT, Australia ultramafic complex by using the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER), L.C. Rowan, J.C. Mars and C.J. Simpson, 99:105
- Morphometry**
- Application of wavelet analysis to the study of spatial pattern of morphotectonic lineaments in digital terrain models. A case study, G. Jordan and B. Schott, 94:31
- Mountain pine beetle**
- Detection of red attack stage mountain pine beetle infestation with high spatial resolution satellite imagery, J.C. White, M.A. Wulder, D. Brooks, R. Reich and R.D. Wheate, 96:340
- Mountain glaciers**
- Surface motion of mountain glaciers derived from satellite optical imagery, E. Berthier, H. Vador, D. Baratoux, Y. Arnaud, C. Vincent, K.L. Feigl, F. Rémy and B. Legrésy, 95:14
- Mountainous hazards**
- Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments, G. Metternicht, L. Hurni and R. Gogu, 98:284
- MPM**
- A contextual classification scheme based on MRF model with improved parameter estimation and multiscale fuzzy line process, B. Tso and R.C. Olsen, 97:127
- MRF**
- A contextual classification scheme based on MRF model with improved parameter estimation and multiscale fuzzy line process, B. Tso and R.C. Olsen, 97:127
- MSG**
- Assessing the potential of thermal infrared satellite surveys for monitoring seismically active areas: The case of Kocaeli (İzmit) earthquake, August 17, 1999, V. Tramutoli, V. Cuomo, C. Filizzola, N. Pergola and C. Pietrapertosa, 96:409
- MSI**
- Retrieval of leaf area index for a coniferous forest by inverting a forest reflectance model, M. Rautiainen, 99:295
- Mud content**
- Characterisation of surface roughness and sediment texture of intertidal flats using ERS SAR imagery, D. van der Wal, P.M.J. Herman and A. Wielemaker-van den Dool, 98:96
- Multi-angle Imaging SpectroRadiometer (MISR)**
- Using angular and spectral shape similarity constraints to improve MISR aerosol and surface retrievals over land, D.J. Diner, J.V. Martonchik, R.A. Kahn, B. Pinty, N. Gobron, D.L. Nelson and B.N. Holben, 94:155
- Multi-angle remote sensing**
- Global mapping of foliage clumping index using multi-angular satellite data, J.M. Chen, C.H. Menges and S.G. Leblanc, 97:447
- Multiangle remote sensing**
- The value of multiangle measurements for retrieving structurally and radiatively consistent properties of clouds, aerosols, and surfaces, D.J. Diner, B.H. Braswell, R. Davies, N. Gobron, J. Hu, Y. Jin, R.A. Kahn, Y. K. N. Loeb, J.-P. Muller, A.W. Nolin, B. Pinty, C.B. Schaaf, G. Seiz and J. Stroeve, 97:495
- Multiangular**
- LAI retrieval from multiangular image classification and inversion of a ray tracing model, R. Casa and H.G. Jones, 98:414

Multigranular

On the choice of spatial and categorical scale in remote sensing land cover classification, J. Ju, S. Gopal and E.D. Kolaczky, 96:62

Multiple season images

Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns, E.J. Laurent, H. Shi, D. Gatzolis, J.P. LeBouton, M.B. Walters and J. Liu, 97:249

Multiscale

On the choice of spatial and categorical scale in remote sensing land cover classification, J. Ju, S. Gopal and E.D. Kolaczky, 96:62

Multi-source forest inventory

Performance of different spectral and textural aerial photograph features in multi-source forest inventory, S. Tuominen and A. Pekkarinen, 94:256

Multispectral

Remote sensing of forest biophysical variables using HyMap imaging spectrometer data, M. Schlerf, C. Atzberger and J. Hill, 95:177

Surface mineral mapping at Steamboat Springs, Nevada, USA, with multi-wavelength thermal infrared images, R.G. Vaughan, S.J. Hook, W.M. Calvin and J.V. Taranik, 99:140

Seamless geological map generation using ASTER in the Broken Hill-Cumamona province of Australia, R.D. Hewson, T.J. Cudahy, S. Mizuhiko, K. Ueda and A.J. Mauger, 99:159

Multispectral and hyperspectral dimensionality

Mineral mapping on the Chilean-Bolivian Altiplano using co-orbital ALI, ASTER and Hyperion imagery: Data dimensionality issues and solutions, B.E. Hubbard and J.K. Crowley, 99:173

Multispectral data

Hyperspectral discrimination of tropical rain forest tree species at leaf to crown scales, M.L. Clark, D.A. Roberts and D.B. Clark, 96:375

Lithologic mapping of the Mordor, NT, Australia ultramafic complex by using the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER), L.C. Rowan, John C. Mars and Colin J. Simpson, 99:105

Multispectral Thermal Imager (MTI)

Extending surface temperature and emissivity retrieval to the mid-infrared (3-5 μm) using the Multispectral Thermal Imager (MTI), A. Mushkin, L.K. Balick and A.R. Gillespie, 98:141

Multispectral TIR

Surface energy fluxes with the Advanced Spaceborne Thermal Emission and Reflection radiometer (ASTER) at the Iowa 2002 SMACEX site (USA), A.N. French, F. Jacob, M.C. Anderson, W.P. Kustas, W. Timmermans, A. Gieske, Z. Su, H. Su, M.F. McCabe, F. Li, J. Prueger and N. Brunsell, 99:55

Multitemporal series

Land cover change detection at coarse spatial scales based on iterative estimation and previous state information, S. Le Hégarat-Masclé, C. Ottlé and C. Guérin, 95:464

Multitemporal

Use of coupled canopy structure dynamic and radiative transfer models to estimate biophysical canopy characteristics, B. Koetz, F. Baret, H. Poilvé and J. Hill, 95:115

Survival analysis of a neotropical rainforest using multitemporal satellite imagery, J.A. Greenberg, S.C. Kefauver, H.C. Stimson, C.J. Yeaton and S.L. Ustin, 96:202

Land cover classification and change analysis of the Twin Cities (Minnesota) Metropolitan Area by multitemporal Landsat remote sensing, F. Yuan, K.E. Sawaya, B.C. Loeffelholz and M.E. Bauer, 98:317

Land cover assessment with MODIS imagery in southern African Miombo ecosystems, F. Sedano, P. Gong and M. Ferrão, 98:429

Multi-temporal

A new GLM-based method for mapping tree cover continuous fields using regional MODIS reflectance data, M. Schwarz and N.E. Zimmermann, 95:428

On the relationship between training sample size and data dimensionality: Monte Carlo analysis of broadband multi-temporal classification, T.G. Van Niel, T.R. McVicar and B. Datt, 98:468

Multivariate optimization technique

Operational algorithm for the retrieval of water quality in the Great Lakes, D. Pozdnyakov, R. Shuchman, A. Korosov and C. Hatt, 97:352

32°00'–34°30'N

Stormwater runoff plumes observed by SeaWiFS radiometer in the Southern California Bight, N.P. Nezlin, P.M. DiGiacomo, E.D. Stein and D. Ackerman, 98:494

32–35° N

Spatial and temporal patterns of remotely-sensed and field-measured rainfall in southern California, N.P. Nezlin and E.D. Stein, 96:228

National level

Land cover assessment with MODIS imagery in southern African Miombo ecosystems, F. Sedano, P. Gong and M. Ferrão, 98:429

NDSI

Mapping dry/wet snow cover in the Indian Himalayas using IRS multispectral imagery, R.P. Gupta, U.K. Haritashya and P. Singh, 97:458

NDVI

Identifying land cover variability distinct from land cover change: Cheatgrass in the Great Basin, B.A. Bradley and J.F. Mustard, 94:204

Spectral mixture analysis for subpixel vegetation fractions in the urban environment: How to incorporate endmember variability?, C. Song, 95:248

Separating surface emissivity and temperature using two-channel spectral indices and emissivity composites and comparison with a vegetation fraction method, P. Dash, F.-M. Göttsche, F.-S. Olesen and H. Fischer, 96:1

Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns, E.J. Laurent, H. Shi, D. Gatzolis, J.P. LeBouton, M.B. Walters and J. Liu, 97:249

Atmospheric conditions for monitoring the long-term vegetation dynamics in the Amazon using normalized difference vegetation index, H. Kobayashi and D.G. Dye, 97:519

A data mining approach for understanding topographic control on climate-induced inter-annual vegetation variability over the United States, A.B. White, P. Kumar and D. Tcheng, 98:1

Vegetation water content estimation for corn and soybeans using spectral indices derived from MODIS near- and short-wave infrared bands, D. Chen, J. Huang and T.J. Jackson, 98:225

A comparison of methods for estimating fractional green vegetation cover within a desert-to-upland transition zone in central New Mexico, USA, J. Xiao and A. Moody, 98:237

Assessment of ASTER land cover and MODIS NDVI data at multiple scales for ecological characterization of an arid urban center, W.L. Stefanov and M. Netzbald, 99:31

Retrieval of leaf area index for a coniferous forest by inverting a forest reflectance model, M. Rautiainen, 99:295

Image masking for crop yield forecasting using AVHRR NDVI time series imagery, J.H. Kastens, T.L. Kastens, D.L.A. Kastens, K.P. Price, E.A. Martinko and R.-Y. Lee, 99:341

A method to convert AVHRR Normalized Difference Vegetation Index time series to a standard viewing and illumination geometry, S.O. Los, P.R.J. North, W.M.F. Grey and M.J. Bamsley, 99:400

NDWI

Determination of phenological dates in boreal regions using normalized difference water index, N. Delbart, L. Kergoat, T. Le Toan, J. Lhermitte and G. Picard, 97:26

Vegetation water content estimation for corn and soybeans using spectral indices derived from MODIS near- and short-wave infrared bands, D. Chen, J. Huang and T.J. Jackson, 98:225

Near infrared

Vicarious calibration of MERIS over dark waters in the near infrared, N. Martiny, R. Santer and I. Smolskaia, 94:475

Detection of blue-absorbing aerosols using near infrared and visible (ocean color) remote sensing observations, D. Nobileau and D. Antoine, 95:368

Near-infrared

Assessing the potential of SeaWiFS and MODIS for estimating chlorophyll concentration in turbid productive waters using red and near-infrared bands, G. Dall'Omo, A.A. Gitelson, D.C. Rundquist, B. Leavitt, T. Barrow and J.C. Holz, 96:176

Neighborhood correlation images

A change detection model based on neighborhood correlation image analysis and decision tree classification, J. Im and J.R. Jensen, 99:326

Neotropical rainforests

Survival analysis of a neotropical rainforest using multitemporal satellite imagery, J.A. Greenberg, S.C. Kefauver, H.C. Stimson, C.J. Yeaton and S.L. Ustin, 96:202

Net primary production

The relative importance of light-use efficiency modifications from environmental conditions and cultivation for estimation of large-scale net primary productivity, J.B. Bradford, J.A. Hicke and W.K. Lauenroth, 96:246

The effects of aggregated land cover data on estimating NPP in northern Wisconsin, D.E. Ahl, S.T. Gower, D.S. Mackay, S.N. Burrows, J.M. Norman and G.R. Diak, 97:1

Net radiation

Estimation of the net radiation using MODIS (Moderate Resolution Imaging Spectroradiometer) data for clear sky days, G. Bisht, V. Venturini, S. Islam and L. Jiang, 97:52

Net radiation flux

Retrieval of evapotranspiration over the Alpilles/ReSeDA experimental site using airborne POLDER sensor and a thermal camera, M. Gómez, A. Olioso, J.A. Sobrino and F. Jacob, 96:399

Neural network

Comparison of non-linear mixture models: sub-pixel classification, W. Liu and E.Y. Wu, 94:145

A hybrid inversion method for mapping leaf area index from MODIS data: experiments and application to broadleaf and needleleaf canopies, H. Fang and S. Liang, 94:405

Operational algorithm for the retrieval of water quality in the Great Lakes, D. Pozdnyakov, R. Shuchman, A. Korosov and C. Hatt, 97:352

Estimating biomass for boreal forests using ASTER satellite data combined with standwise forest inventory data, P. Muukkonen and J. Heiskanen, 99:434

Neutral Network

Retrieval of Chlorophyll *a*, suspended solids, and colored dissolved organic matter in Tokyo Bay using ASTER data, M. Kishino, A. Tanaka and J. Ishizaka, 99:66

New Zealand

Intercomparison of ocean colour band-ratio algorithms for chlorophyll concentration in the Subtropical Front east of New Zealand, M.H. Pinkerton, K.M. Richardson, P.W. Boyd, M.P. Gall, J. Zeldis, M.D. Oliver and R.J. Murphy, 97:382

New-ice

Classification of new-ice in the Greenland Sea using Satellite SSM/I radiometer and SeaWinds scatterometer data and comparison with ice model, R. Tonboe and L. Toudal, 97:277

Nitrogen

Testing the potential of multi-spectral remote sensing for retrospectively estimating fire severity in African Savannahs, A.M.S. Smith, M.J. Wooster, N.A. Drake, F.M. Dipotso, M.J. Falkowski and A.T. Hudak, 97:92

NOAA AVHRR

A method to convert AVHRR Normalized Difference Vegetation Index time series to a standard viewing and illumination geometry, S.O. Los, P.R.J. North, W.M.F. Grey and M.J. Barnsley, 99:400

NOAA snow charts

Evaluation of spring snow covered area depletion in the Canadian Arctic from NOAA snow charts, L. Wang, M. Sharp, R. Brown, C. Derksen and B. Rivard, 95:453

NOAA/AVHRR

Estimating evapotranspiration of European forests from NOAA-imagery at satellite overpass time: Towards an operational processing chain for integrated optical and thermal sensor data products, W.W. Verstraeten, F. Veroustraete and J. Feyen, 96:256

Detection method of the Kuroshio front using the satellite-derived chlorophyll-*a* images, W. Takahashi and H. Kawamura, 97:83

Atmospheric conditions for monitoring the long-term vegetation dynamics in the Amazon using normalized difference vegetation index, H. Kobayashi and D.G. Dye, 97:519

Non-linear

Comparison of non-linear mixture models: sub-pixel classification, W. Liu and E.Y. Wu, 94:145

Non-parametric classification

Decision tree regression for soft classification of remote sensing data, M. Xu, P. Watanachaturaporn, P.K. Varshney and M.K. Arora, 97:322

Non-photochemical quenching

Simple reflectance indices track heat and water stress-induced changes in steady-state chlorophyll fluorescence at the canopy scale, S.Z. Dobrowski, J.C. Pushnik, P.J. Zarco-Tejada and S.L. Ustin, 97:403

Non-photosynthetic vegetation

Ecosystem structure along bioclimatic gradients in Hawai'i from imaging spectroscopy, G.P. Asner, A.J. Elmore, R. Flint Hughes, A.S. Warner and P.M. Vitousek, 96:497

Normalization

Spectral unmixing of normalized reflectance data for the deconvolution of lichen and rock mixtures, J. Zhang, B. Rivard and A. Sánchez-Azofeifa, 95:57

Normalized burn ratio

Evaluation of remotely sensed indices for assessing burn severity in interior Alaska using Landsat TM and ETM+, J. Epting, D. Verbyla and B. Sorbel, 96:328

Normalized difference moisture index

Comparison of time series tasseled cap wetness and the normalized difference moisture index in detecting forest disturbances, S. Jin and S.A. Sader, 94:364

Normalized difference vegetation index

The relative importance of light-use efficiency modifications from environmental conditions and cultivation for estimation of large-scale net primary productivity, J.B. Bradford, J.A. Hicke and W.K. Lauenroth, 96:246

A simple and effective radiometric correction method to improve landscape change detection across sensors and across time, X. Chen, L. Vierling and D. Deering, 98:63

Multi-platform comparisons of MODIS and AVHRR normalized difference vegetation index data, K. Gallo, L. Ji, B. Reed, J. Eidsink and J. Dwyer, 99:221

North Anatolian fault

Assessing the potential of thermal infrared satellite surveys for monitoring seismically active areas: The case of Kocaeli (İzmit) earthquake, August 17, 1999, V. Tramutoli, V. Cuomo, C. Filizzola, N. Pergola and C. Pietrapertosa, 96:409

Northeast Atlantic Ocean

Seasonal and interannual variability of surface circulation in the Cape Verde region from 8 years of merged T/P and ERS-2 altimeter data, C. Lázaro, M.J. Fernandes, A.M.P. Santos and P. Oliveira, 98:45

northern landcover

Signature extension through space for northern landcover classification: A comparison of radiometric correction methods, I. Olthof, C. Butson and R. Fraser, 95:290

Northern Quebec

Mapping lichen in a caribou habitat of Northern Quebec, Canada, using an enhancement-classification method and spectral mixture analysis, J. Théau, D.R. Peddle and C.R. Duguay, 94:232

NPP

Estimation of net primary productivity by integrating remote sensing data with an ecosystem model, M.K. Hazarika, Y. Yasuoka, A. Ito and D. Dye, 94:298

Object-based accuracy assessment

Multitemporal censusing of a population of eastern hemlock (*Tsuga canadensis* L.) from remotely sensed imagery using an automated segmentation and reconciliation procedure, W.R. Lamar, J.B. McGraw and T.A. Warner, 94:133

Observation errors

Quantifying the uncertainty in passive microwave snow water equivalent observations, J.L. Foster, C. Sun, J.P. Walker, R. Kelly, A. Chang, J. Dong and H. Powell, 94:187

Ocean color

Consistent merging of satellite ocean color data sets using a bio-optical model, S. Maritorena and D.A. Siegel, 94:429

Satellite-derived parameters for biological modelling in coastal waters: Illustration over the eastern continental shelf of the Bay of Biscay, F. Gohin, S. Loyer, M. Lunven, C. Labry, J.-M. Froidefond, D. Delmas, M. Huret and A. Herbland, 95:29

Evaluation of SeaWiFS chlorophyll algorithms in the Southwestern Atlantic and Southern Oceans, C.A.E. Garcia, V.M.T. Garcia and C.R. McClain, 95:125

Detection of blue-absorbing aerosols using near infrared and visible (ocean color) remote sensing observations, D. Nobileau and D. Antoine, 95:368

Red tide detection and tracing using MODIS fluorescence data: A regional example in SW Florida coastal waters, C. Hu, F.E. Muller-Karger, C.(Judd) Taylor, K.L. Carder, C. Kelble, E. Johns and C.A. Heil, 97:311

Assessment of apparent and inherent optical properties derived from SeaWiFS with field data, F. Mélin, J.-F. Berthon and G. Zibordi, 97:540

An improved in-situ bio-optical data set for ocean color algorithm development and satellite data product validation, P.J. Werdell and S.W. Bailey, 98:122

Stormwater runoff plumes observed by SeaWiFS radiometer in the Southern California Bight, N.P. Nezlin, P.M. DiGiacomo, E.D. Stein and D. Ackerman, 98:494

Modeling spectral reflectance of optically complex waters using bio-optical measurements from Tokyo Bay, H. Feng, J.W. Campbell, M.D. Dowell and T.S. Moore, 99:232

Ocean colour

Estimating suspended sediment concentrations from ocean colour measurements in moderately turbid waters; the impact of variable particle scattering properties, C.E. Binding, D.G. Bowers and E.G. Mitchelson-Jacob, 94:373

Intercomparison of ocean colour band-ratio algorithms for chlorophyll concentration in the Subtropical Front east of New Zealand, M.H. Pinkerton, K.M. Richardson, P.W. Boyd, M.P. Gall, J. Zeldis, M.D. Oliver and R.J. Murphy, 97:382

Ocean optics

Assessment of apparent and inherent optical properties derived from SeaWiFS with field data, F. Mélin, J.-F. Berthon and G. Zibordi, 97:540

Ocean surface fronts

Detection method of the Kuroshio front using the satellite-derived chlorophyll-a images, W. Takahashi and H. Kawamura, 97:83

Oceanography

Analysis of along track scanning radiometer-2 (ATSR-2) data for clouds, glint and sea surface temperature using neural networks, J.J. Simpson, Y.L.(Ben) Tsou, A. Schmidt and A. Harris, 98:152

Oil spill

Application of AVIRIS data in detection of oil-induced vegetation stress and cover change at Jornada, New Mexico, L. Li, S.L. Ustin and M. Lay, 94:1

Oil spill detection by satellite remote sensing, C. Brekke and A.H.S. Solberg, 95:1

Operational crop discrimination

Efficiency of crop identification based on optical and SAR image time series, X. Blaes, L. Vanhalle and P. Defourny, 96:352

Ophiolite

Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared "radiance-at-sensor" data, Y. Ninomiya, B. Fu and T.J. Cudahy, 99:127

Optic-acoustic comparison

Detection of shallow subtidal corals from IKONOS satellite and QTC View (50, 200 kHz) single-beam sonar data (Arabian Gulf; Dubai, UAE), B.M. Riegl and S.J. Purkis, 95:96

Optical index

Assessing vineyard condition with hyperspectral indices: Leaf and canopy reflectance simulation in a row-structured discontinuous canopy, P.J. Zarco-Tejada, A. Berjón, R. López-Lozano, J.R. Miller, P. Martín, V. Cachorro, M.R. González and A. de Frutos, 99:271

Optical properties

New tools for the study of oceanic eddies: Satellite derived inherent optical properties, F.E. Hoge and P.E. Lyon, 95:444

Optically active material

Role of sensor noise in hyperspectral remote sensing of natural waters: Application to retrieval of phytoplankton pigments, I. Levin, E. Levina, G. Gilbert and S. Stewart, 95:264

Optimal bands

Identifying optimal spectral bands from in situ measurements of Great Lakes coastal wetlands using second-derivative analysis, B.L. Becker, D.P. Lusch and J. Qi, 97:238

Optimized sampling

Optimal field sampling for targeting minerals using hyperspectral data, P. Debba, F.J.A. van Ruitenbeek, F.D. van der Meer, E.J.M. Carranza and A. Stein, 99:373

Orbital drift

A method to convert AVHRR Normalized Difference Vegetation Index time series to a standard viewing and illumination geometry, S.O. Los, P.R.J. North, W.M.F. Grey and M.J. Barnsley, 99:400

Organic matter

New tools for the study of oceanic eddies: Satellite derived inherent optical properties, F.E. Hoge and P.E. Lyon, 95:444

Orthorectification

Combination of SRTM3 and repeat ASTER data for deriving alpine glacier flow velocities in the Bhutan Himalaya, A. Kääb, 94:463

Outliers

Parametric (modified least squares) and non-parametric (Theil-Sen) linear regressions for predicting biophysical parameters in the presence of measurement errors, Richard Fernandes and S.G. Leblanc, 95:303

Oxygen absorption band

Remote sensing of sunlight-induced chlorophyll fluorescence and reflectance of Scots pine in the boreal forest during spring recovery, J. Louis, A. Ounis, J.-M. Ducruet, S. Evain, T. Laurila, T. Thum, M. Aurela, G. Wingsle, L. Alonso, R. Pedros and I. Moya, 96:37

Paddy field

A crop phenology detection method using time-series MODIS data, T. Sakamoto, M. Yokozawa, H. Toritani, M. Shibayama, N. Ishitsuka and H. Ohno, 96:366

Paddy rice fields

Mapping paddy rice agriculture in southern China using multi-temporal MODIS images, X. Xiao, S. Boles, J. Liu, D. Zhuang, S. Froking, C. Li, W. Salas and B. Moore III, 95:480

Pair potential function

Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height, T. Neeff, G.S. Biging, L.V. Dutra, C.C. Freitas and J.R. dos Santos, 97:484

Palaeostress

The use of Remote Sensing techniques and empirical tectonic models for inference of geological structures: Bridging from regional to local scales, P.C. Fernandes da Silva, J.C. Cripps and S.M. Wise, 96:18

PAR

Mapping PAR using MODIS atmosphere products, P.E. Van Laake and G.A. Sanchez-Azofeifa, 94:554

Parameter identification

Using coarse remote sensing radar observations to control the trajectory of a simple Sahelian land surface model, L. Jarlan, E. Mougin, P. Mazzega, M. Schoenauer, Y. Tracol, P. Hiernaux, 94:269

Parameterization

Simple parameterizations of the radiation budget of uniform broadleaved and coniferous canopies, S. Smolander and P. Stenberg, 94:355

PARAS

Application of photon recollision probability in coniferous canopy reflectance simulations, M. Rautiainen and P. Stenberg, 96:98

Parcel-based classification

Efficiency of crop identification based on optical and SAR image time series, X. Blaes, L. Vanhalle and P. Defourny, 96:352

Parque Nacional Yasuní

Survival analysis of a neotropical rainforest using multitemporal satellite imagery, J.A. Greenberg, S.C. Kefauver, H.C. Stimson, C.J. Yeaton and S.L. Ustin, 96:202

Partial upwelling

Characterizing partial upwellings and surface circulation at Lake Tahoe, California-Nevada, USA with thermal infrared images, T.E. Steissberg, S.J. Hook and S.G. Schladow, 99:2

Passive microwave

Quantifying the uncertainty in passive microwave snow water equivalent observations, J.L. Foster, C. Sun, J.P. Walker, R. Kelly, A. Chang, J. Dong and H. Powell, 94:187

Evaluation of passive microwave snow water equivalent retrievals across the boreal forest/tundra transition of western Canada, C. Derksen, A. Walker and B. Goodison, 96:315

Passive microwave data

Flood monitoring over the Mackenzie River Basin using passive microwave data, M. Temimi, R. Leconte, F. Brisette and N. Chaouch, 98:344

Passive microwave instruments

Improving soil wetness variations monitoring from passive microwave satellite data: The case of April 2000 Hungary flood, T. Lacava, V. Cuomo, E.V. Di Leo, N. Pergola, F. Romano and V. Tramutoli, 96:135

Passive remote sensing

Remote sensing of sunlight-induced chlorophyll fluorescence and reflectance of Scots pine in the boreal forest during spring recovery, J. Louis, A. Ounis, J.-M. Ducruet, S. Evain, T. Laurila, T. Thum, M. Aurela, G. Wingsle, L. Alonso, R. Pedros and I. Moya, 96:37

Patch size

MODIS time-series imagery for forest disturbance detection and quantification of patch size effects, S. Jin and S.A. Sader, 99:462

Pattern

Evaluation of seasonal variation of MODIS derived leaf area index at two European deciduous broadleaf forest sites, Q. Wang, J. Tenhunen, N.Q. Dinh, M. Reichstein, D. Otieno, A. Granier and K. Pilegard, 96:475

Peace-Athabasca Delta

Towards operational monitoring of a northern wetland using geomatics-based techniques, J. Töyrä and A. Pietroniro, 97:174

Per-pixel comparison

A comparative analysis of the Global Land Cover 2000 and MODIS land cover data sets, C. Giri, Z. Zhu and B. Reed, 94:123

Peru

Optimization of sampling schemes for vegetation mapping using fuzzy classification, R. Tapia, A. Stein and W. Bijker, 99:425

Peruvian Amazonia

Classification of Amazonian primary rain forest vegetation using Landsat ETM+ satellite imagery, K.J. Salvoara, S. Thessler, R.N. Malik and H. Tuomisto, 97:39

Phenological stage

A crop phenology detection method using time-series MODIS data, T. Sakamoto, M. Yokozawa, H. Toritani, M. Shibayama, N. Ishitsuka and H. Ohno, 96:366

Phenology

Use of coupled canopy structure dynamic and radiative transfer models to estimate biophysical canopy characteristics, B. Koetz, F. Baret, H. Poilvé and J. Hill, 95:115

Evaluation of seasonal variation of MODIS derived leaf area index at two European deciduous broadleaf forest sites, Q. Wang, J. Tenhunen, N.Q. Dinh, M. Reichstein, D. Otieno, A. Granier and K. Pilegard, 96:475

Determination of phenological dates in boreal regions using normalized difference water index, N. Delbart, L. Kergoat, T. Le Toan, J. Lhermitte and G. Picard, 97:26

Atmospheric conditions for monitoring the long-term vegetation dynamics in the Amazon using normalized difference vegetation index, H. Kobayashi and D.G. Dye, 97:519

Photochemical quenching

Simple reflectance indices track heat and water stress-induced changes in steady-state chlorophyll fluorescence at the canopy scale, S.Z. Dobrowski, J.C. Pushnik, P.J. Zarco-Tejada and S.L. Ustin, 97:403

Photochemical reflectance index

A MODIS-derived photochemical reflectance index to detect inter-annual variations in the photosynthetic light-use efficiency of a boreal deciduous forest, G.G. Drolet, K.F. Huemmrich, F.G. Hall, E.M. Middleton, T.A. Black, A.G. Barr and H.A. Margolis, 98:212

Photogoniometer

Leaf BRDF measurements and model for specular and diffuse components differentiation, L. Bousquet, S. Lachérade, S. Jacquemoud and I. Moya, 98:201

PHYTIS

Multiple shadow fractions in spectral mixture analysis of a cotton canopy, G.J. Fitzgerald, P.J. Pinter Jr., D.J. Hunsaker and T.R. Clarke, 97:526

Phytoplankton

New tools for the study of oceanic eddies: Satellite derived inherent optical properties, F.E. Hoge and P.E. Lyon, 95:444

Phytoplankton pigments

Estimating phytoplankton biomass in coastal waters of Alaska using airborne remote sensing, M.A. Montes-Hugo, K. Carder, R.J. Foy, J. Cannizzaro, E. Brown and S. Pegau, 98:481

Piezometric level

Mapping ground subsidence induced by aquifer overexploitation using advanced Differential SAR Interferometry: Vega Media of the Segura River (SE Spain) case study, R. Tomás, Y. Márquez, J.M. Lopez-Sanchez, J. Delgado, P. Blanco, J.J. Mallorqui, M. Martínez, G. Herrera and J. Mulas, 98:269

Pinus edulis

Spectral sensing of foliar water conditions in two co-occurring conifer species: *Pinus edulis* and *Juniperus monosperma*, H.C. Stimson, D.D. Breshears, S.L. Ustin and S.C. Kefauver, 96:108

Plant colonization

Analysis of plant colonization on an arctic moraine since the end of the Little Ice Age using remotely sensed data and a Bayesian approach, M. Moreau, D. Laffly, D. Joly and T. Brossard, 99:244

Plant species richness

Indicators of plant species richness in AVIRIS spectra of a mesic grassland, G.A. Carter, A.K. Knapp, J.E. Anderson, G.A. Hoch and M.D. Smith, 98:304

Plant stress monitoring

Simple reflectance indices track heat and water stress-induced changes in steady-state chlorophyll fluorescence at the canopy scale, S.Z. Dobrowski, J.C. Pushnik, P.J. Zarco-Tejada and S.L. Ustin, 97:403

Plumes

Stormwater runoff plumes observed by SeaWiFS radiometer in the Southern California Bight, N.P. Nezlin, P.M. DiGiacomo, E.D. Stein and D. Ackerman, 98:494

POLDER

Global mapping of foliage clumping index using multi-angular satellite data, J.M. Chen, C.H. Menges and S.G. Leblanc, 97:447

Variability of biome reflectance directional signatures as seen by POLDER, C. Bacour and F.-M. Bréon, 98:80

Pond-and-plug method

A local-scale, high-resolution evapotranspiration mapping algorithm (ETMA) with hydroecological applications at riparian meadow restoration sites, S.P. Loheide II and S.M. Gorelick, 98:182

Populus

Predicting riparian evapotranspiration from MODIS vegetation indices and meteorological data, P.L. Nagler, J. Cleverly, E. Glenn, D. Lampkin, A. Huete and Z. Wan, 94:17

Posidonia oceanica

Use of SPOT 5 for mapping seagrasses: An application to *Posidonia oceanica*, V. Pasqualini, C. Pergent-Martini, G. Pergent, M. Agreil, G. Skoufas, L. Sourbes and A. Tsirika, 94:39

Post-fire chronosequence

A simple and effective radiometric correction method to improve landscape change detection across sensors and across time, X. Chen, L. Vierling and D. Deering, 98:63

Precipitation

Spatial and temporal patterns of remotely-sensed and field-measured rainfall in southern California, N.P. Nezlin and E.D. Stein, 96:228

Stormwater runoff plumes observed by SeaWiFS radiometer in the Southern California Bight, N.P. Nezlin, P.M. DiGiacomo, E.D. Stein and D. Ackerman, 98:494

Precision agriculture

Multiple shadow fractions in spectral mixture analysis of a cotton canopy, G.J. Fitzgerald, P.J. Pinter Jr., D.J. Hunsaker and T.R. Clarke, 97:526

Precision farming

Use of coupled canopy structure dynamic and radiative transfer models to estimate biophysical canopy characteristics, B. Koetz, F. Baret, H. Poilvé and J. Hill, 95:115

Prediction

Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns, E.J. Laurent, H. Shi, D. Gatzolis, J.P. LeBouton, M.B. Walters and J. Liu, 97:249

PRI

Remote sensing of sunlight-induced chlorophyll fluorescence and reflectance of Scots pine in the boreal forest during spring recovery, J. Louis, A. Ounis, J.-M. Ducruet, S. Evain, T. Laurila, T. Thum, M. Aurela, G. Wingsle, L. Alonso, R. Pedros and I. Moya, 96:37

Primary forest

Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height, T. Neeff, G.S. Baging, L.V. Dutra, C.C. Freitas and J.R. dos Santos, 97:484

Principal component analysis

Geostatistical and local cluster analysis of high resolution hyperspectral imagery for detection of anomalies, P. Goovaerts, G.M. Jacquez and A. Marcus, 95:351

Probability sampling

Maximum posterior probability estimators of map accuracy, B.M. Steele, 99:254

Productivity

Estimating phytoplankton biomass in coastal waters of Alaska using airborne remote sensing, M.A. Montes-Hugo, K. Carder, R.J. Foy, J. Cannizzaro, E. Brown and S. Pegau, 98:481

Profiling LiDAR

Locating and estimating the extent of Delmarva fox squirrel habitat using an airborne LiDAR profiler, R. Nelson, C. Keller and M. Ratnaswamy, 96:292

Projection pursuit regression

A hybrid inversion method for mapping leaf area index from MODIS data: experiments and application to broadleaf and needleleaf canopies, H. Fang and S. Liang, 94:405

PROSPECT

Estimating light absorption by chlorophyll, leaf and canopy in a deciduous broadleaf forest using MODIS data and a radiative transfer model, Q. Zhang, X. Xiao, B. Braswell, E. Linder, F. Baret and B. Moore III, 99:357

QTC view

Detection of shallow subtidal corals from IKONOS satellite and QTC View (50, 200 kHz) single-beam sonar data (Arabian Gulf; Dubai, UAE), B.M. Riegl and S.J. Purkis, 95:96

Quartz

Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared "radiance-at-sensor" data, Y. Ninomiya, B. Fu and T.J. Cudahy, 99:127

QuickBird

Image-based atmospheric correction of QuickBird imagery of Minnesota cropland, J. Wu, D. Wang and M.E. Bauer, 99:315

Radar

Evaluation of a rough soil surface description with ASAR-ENVISAT radar data, M. Zribi, N. Baghdadi, N. Holah, O. Fafin and C. Guérin, 95:67

ENVISAT radar altimeter measurements over continental surfaces and ice caps using the ICE-2 retracking algorithm, B. Legresy, F. Papa, F. Remy, G. Vinay, M. van den Bosch and O.-Z. Zanife, 95:150

New methodology for soil surface moisture estimation and its application to ENVISAT-ASAR multi-incidence data inversion, M. Zribi, N. Baghdadi, N. Holah and O. Fafin, 96:485

Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height, T. Neeff, G.S. Baging, L.V. Dutra, C.C. Freitas and J.R. dos Santos, 97:484

Radiance

Indicators of plant species richness in AVIRIS spectra of a mesic grassland, G.A. Carter, A.K. Knapp, J.E. Anderson, G.A. Hoch and M.D. Smith, 98:304

Radiance spectra

Extension of retrospective datasets using multiple sensors. An approach to radiometric intercalibration of Landsat TM and MSS data, A. Röder, T. Kuemmerle and J. Hill, 95:195

Radiative transfer

BRDF measurement of understory vegetation in pine forests: dwarf shrubs, lichen, and moss, J.I. Peltoniemi, S. Kaasalainen, J. Näreinen, M. Rautiainen, P. Stenberg, H. Smolander, S. Smolander and P. Voipio, 94:343

Simple parameterizations of the radiation budget of uniform broadleaved and coniferous canopies, S. Smolander and P. Stenberg, 94:355

Vicarious calibration of MERIS over dark waters in the near infrared, N. Martiny, R. Santer and I. Smolskaia, 94:475

Use of coupled canopy structure dynamic and radiative transfer models to estimate biophysical canopy characteristics, B. Koetz, F. Baret, H. Poilvé and J. Hill, 95:115

Comparison of active and passive water vapor remote sensing from space: An analysis based on the simulated performance of IASI and space borne differential absorption lidar, V. Wulfmeyer, H. Bauer, P. Di Girolamo and C. Serio, 95:211

Evaluation of seasonal variation of MODIS derived leaf area index at two European deciduous broadleaf forest sites, Q. Wang, J. Tenhunen, N.Q. Dinh, M. Reichstein, D. Otieno, A. Granier and K. Pilegar, 96:475

Assessing vineyard condition with hyperspectral indices: Leaf and canopy reflectance simulation in a row-structured discontinuous canopy, P.J. Zarco-Tejada, A. Berjón, R. López-Lozano, J.R. Miller, P. Martin, V. Cachorro, M.R. González and A. de Frutos, 99:271

Canopy directional emissivity: Comparison between models, J.A. Sobrino, J.C. Jiménez-Muñoz and W. Verhoef, 99:304

Radiative transfer model

Effects of channel morphology and sensor spatial resolution on image-derived depth estimates, C.J. Legleiter and D.A. Roberts, 95:231

Radiative transfer modelling

Using coarse remote sensing radar observations to control the trajectory of a simple Sahelian land surface model, L. Jarlan, E. Mougin, P. Mazzega, M. Schoenauer, Y. Tracol, P. Hiernaux, 94:269

Radiometric correction

Signature extension through space for northern landcover classification: A comparison of radiometric correction methods, I. Olthof, C. Butson and R. Fraser, 95:290

Radiometric normalization

Landsat-7 ETM+ radiometric normalization comparison for northern mapping applications, I. Olthof, D. Pouliot, R. Fernandes and R. Latifovic, 95:388

Radiometry

Intercomparison of ground-based microwave remote sensing measurements of stratospheric ozone over the Mendoza region, Argentina with HALOE data, C.M. Puliafito and S.E. Puliafito, 94:61

Rain forest

Classification of Amazonian primary rain forest vegetation using Landsat ETM+ satellite imagery, K.J. Salovaara, S. Thessler, R.N. Malik and H. Tuomisto, 97:39

Rainfall

Characteristics of atmospheric divergence and convergence in the Indian Ocean inferred from scatterometer winds, A.J. Luis and P.C. Pandey, 97:231

Rainforest

Substrate age and precipitation effects on Hawaiian forest canopies from spaceborne imaging spectroscopy, G.P. Asner, K.M. Carlson and R.E. Martin, 98:457

Rating curve

Flood monitoring over the Mackenzie River Basin using passive microwave data, M. Temimi, R. Leconte, F. Brissette and N. Chaouch, 98:344

Realized niche model

Modelling local distribution of an Arctic dwarf shrub indicates an important role for remote sensing of snow cover, P.S.A. Beck, E. Kalmbach, D. Joly, A. Stien and L. Nilsen, 98:110

Red

Assessing the potential of SeaWiFS and MODIS for estimating chlorophyll concentration in turbid productive waters using red and near-infrared bands, G. Dall'Olmo, A.A. Gitelson, D.C. Rundquist, B. Leavitt, T. Barrow and J.C. Holz, 96:176

RED-NIR

Ganges and Indus river basin land use/land cover (LULC) and irrigated area mapping using continuous streams of MODIS data, P.S. Thenkabail, M. Schull and H. Tural, 95:317

Red tide

Red tide detection and tracing using MODIS fluorescence data: A regional example in SW Florida coastal waters, C. Hu, F.E. Muller-Karger, C.(Judd) Taylor, K.L. Carder, C. Kelble, E. Johns and C.A. Heil, 97:311

Reduced major axis

Parametric (modified least squares) and non-parametric (Theil-Sen) linear regressions for predicting biophysical parameters in the presence of measurement errors, R. Fernandes and S.G. Leblanc, 95:303

Reduced major axis regression

Comparison of regression and geostatistical methods for mapping Leaf Area Index (LAI) with Landsat ETM+ data over a boreal forest, M. Berterretche, A.T. Hudak, W.B. Cohen, T.K. Maierseperger, S.T. Gower and J. Dungan, 96:49

Reduced simple ratio

A simple and effective radiometric correction method to improve landscape change detection across sensors and across time, X. Chen, L. Vierling and D. Deering, 98:63

Reflectance

Ganges and Indus river basin land use/land cover (LULC) and irrigated area mapping using continuous streams of MODIS data, P.S. Thenkabail, M. Schull and H. Tural, 95:317

Indicators of plant species richness in AVIRIS spectra of a mesic grassland, G.A. Carter, A.K. Knapp, J.E. Anderson, G.A. Hoch and M.D. Smith, 98:304

Reflectance model

A feasible method for fractional snow cover mapping in boreal zone based on a reflectance model, S.J. Metsämäki, S.T. Anttila, H.J. Markus and J.M. Vepsäläinen, 95:77

Reflectance spectra

Discolored seawater detection using ASTER reflectance products: A case study of Satsuma-Iwojima, Japan, M. Urai and S. Machida, 99:95

Reflectance spectroscopy

Mapping microphytobenthos biomass by non-linear inversion of visible-infrared hyperspectral images, J.-P. Combe, P. Launeau, V. Carrère, D. Despan, V. Méléder, L. Barillé and C. Sotin, 98:371

Regional

Patterns of covariance between forest stand and canopy structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:517

Geographic variability in lidar predictions of forest stand structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:532

Regional analysis

A MODIS-derived photochemical reflectance index to detect inter-annual variations in the photosynthetic light-use efficiency of a boreal deciduous forest, G.G. Drolet, K.F. Huemmrich, F.G. Hall, E.M. Middleton, T.A. Black, A.G. Barr and H.A. Margolis, 98:212

Regression

Parametric (modified least squares) and non-parametric (Theil-Sen) linear regressions for predicting biophysical parameters in the presence of measurement errors, R. Fernandes and S.G. Leblanc, 95:303

Regression analysis

Estimating biomass for boreal forests using ASTER satellite data combined with standwise forest inventory data, P. Muukkonen and J. Heiskanen, 99:434

Regression techniques

Comparing regression methods in estimation of biophysical properties of forest stands from two different inventories using laser scanner data, E. Næsset, O.M. Bollandsås and T. Gobakken, 94:541

Regression tree

Comparison of non-linear mixture models: sub-pixel classification, W. Liu and E.Y. Wu, 94:145

Relative radiometric normalization

A simple and effective radiometric correction method to improve landscape change detection across sensors and across time, X. Chen, L. Vierling and D. Deering, 98:63

Remote sensing

Statistical evaluation of remotely sensed snow-cover products with constraints from streamflow and SNOTEL measurements, X. Zhou, H. Xie and J.M.H. Hendrickx, 94:214

A simple method for removing 3-D radiative effects in satellite retrievals of surface irradiance, K. Wyser, W. O'Hirok and C. Gautier, 94:335

BRDF measurement of understory vegetation in pine forests: dwarf shrubs, lichen, and moss, J.I. Peltoniemi, S. Kaasalainen, J. Näreänen, M. Rautiainen, P. Stenberg, H. Smolander, S. Smolander and P. Voipio, 94:343

Estimating forest canopy fuel parameters using LIDAR data, H.-E. Andersen, R.J. McGaughey and S.E. Reutebuch, 94:441

Mapping tropical forest structure in southeastern Madagascar using remote sensing and artificial neural networks, J.C. Ingram, T.P. Dawson and R.J. Whittaker, 94:491

Mapping lake CDOM by satellite remote sensing, T. Kutser, D.C. Pierson, K.Y. Kallio, A. Reinart and S. Sobek, 94:535

Improvements of the MODIS terrestrial gross and net primary production global data set, M. Zhao, F.A. Heinsch, R.R. Nemani and S.W. Running, 95:164

Effects of channel morphology and sensor spatial resolution on image-derived depth estimates, C.J. Legleiter and D.A. Roberts, 95:231

- Glacial cover mapping (1987-1996) of the Cordillera Blanca (Peru) using satellite imagery, W. Silverio and J.-M. Jaquet, 95:342
- New tools for the study of oceanic eddies: Satellite derived inherent optical properties, F.E. Hoge and P.E. Lyon, 95:444
- Satellite mapping of CO emission from forest fires in Northwest America using MOPITT measurements, J. Liu, J.R. Drummond, Q. Li, J.C. Gille and D.C. Ziskin, 95:502
- Survival analysis of a neotropical rainforest using multitemporal satellite imagery, J.A. Greenberg, S.C. Kefauver, H.C. Stimson, C.J. Yeaton and S.L. Ustin, 96:202
- The relative importance of light-use efficiency modifications from environmental conditions and cultivation for estimation of large-scale net primary productivity, J.B. Bradford, J.A. Hicke and W.K. Lauenroth, 96:246
- Super-resolution land cover mapping using a Markov random field based approach, T. Kasetskasem, M.K. Arora and P.K. Varshney, 96:302
- A crop phenology detection method using time-series MODIS data, T. Sakamoto, M. Yokozawa, H. Toritani, M. Shibayama, N. Ishitsuka and H. Ohno, 96:366
- Ecosystem structure along bioclimatic gradients in Hawai'i from imaging spectroscopy, G.P. Asner, A.J. Elmore, R. Flint Hughes, A.S. Warner and P.M. Vitousek, 96:497
- The effects of aggregated land cover data on estimating NPP in northern Wisconsin, D.E. Ahl, S.T. Gower, D.S. Mackay, S.N. Burrows, J.M. Norman and G.R. Diak, 97:1
- Towards operational monitoring of a northern wetland using geomatics-based techniques, J. Töyrä and A. Pietroniro, 97:174
- Assessments of urban growth in the Tampa Bay watershed using remote sensing data, G. Xian and M. Crane, 97:203
- Using MODIS snow cover maps in modeling snowmelt runoff process in the eastern part of Turkey, A. Emre Tekeli, Z. Akyürek, A. Arda Şorman, A. Şensoy and A. Ünal Şorman, 97:216
- Multi-temporal JERS SAR data in boreal forest biomass mapping, Y. Rauste, 97:263
- Red tide detection and tracing using MODIS fluorescence data: A regional example in SW Florida coastal waters, C. Hu, F.E. Muller-Karger, C.(Judd) Taylor, K.L. Carder, C. Kelble, E. Johns and C.A. Heil, 97:311
- Evapotranspiration on western U.S. rivers estimated using the Enhanced Vegetation Index from MODIS and data from eddy covariance and Bowen ratio flux towers, P.L. Nagler, R.L. Scott, C. Westenberg, J.R. Cleverly, E.P. Glenn and A.R. Huete, 97:337
- Detecting near-surface moisture stress in *Sphagnum* spp., A. Harris, R.G. Bryant and A.J. Baird, 97:371
- Intercomparison of ocean colour band-ratio algorithms for chlorophyll concentration in the Subtropical Front east of New Zealand, M.H. Pinkerton, K.M. Richardson, P.W. Boyd, M.P. Gall, J. Zeldis, M.D. Oliver and R.J. Murphy, 97:382
- Simple reflectance indices track heat and water stress-induced changes in steady-state chlorophyll fluorescence at the canopy scale, S.Z. Dobrowski, J.C. Pushnik, P.J. Zarco-Tejada and S.L. Ustin, 97:403
- Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height, T. Neeff, G.S. Biging, L.V. Dutra, C.C. Freitas and J.R. dos Santos, 97:484
- Comparison between the interannual variability of snow parameters derived from SSM/I and the Ob river discharge, M. Grippa, N. Mognard and T. Le Toan, 98:35
- An improved in-situ bio-optical data set for ocean color algorithm development and satellite data product validation, P.J. Werdell and S.W. Bailey, 98:122
- Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments, G. Metternicht, L. Hurni and R. Gogu, 98:284
- Spatial and temporal patterns of China's cropland during 1990-2000: An analysis based on Landsat TM data, J. Liu, M. Liu, H. Tian, D. Zhuang, Z. Zhang, W. Zhang, X. Tang and X. Deng, 98:442
- Estimating phytoplankton biomass in coastal waters of Alaska using airborne remote sensing, M.A. Montes-Hugo, K. Carder, R.J. Foy, J. Cannizzaro, E. Brown and S. Pegau, 98:481
- Discolored seawater detection using ASTER reflectance products: A case study of Satsuma-Iwojima, Japan, M. Urai and S. Machida, 99:95
- Lithologic mapping of the Mordor, NT, Australia ultramafic complex by using the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER), L.C. Rowan, J.C. Mars and C.J. Simpson, 99:105
- Modeling spectral reflectance of optically complex waters using bio-optical measurements from Tokyo Bay, H. Feng, J.W. Campbell, M.D. Dowell and T.S. Moore, 99:232
- Floodplain water storage in the Negro River basin estimated from microwave remote sensing of inundation area and water levels, F. Frappart, F. Seyler, J.-M. Martinez, J.G. León and A. Cazenave, 99:387
- Detecting major terrain parameters relating to mass movements' occurrence using GIS, remote sensing and statistical correlations, case study Lebanon, C. Abdallah, J. Chorowicz, R. Bou Kheir and M. Khawlie, 99:448
- Remote sensing of the ocean**
- Role of sensor noise in hyperspectral remote sensing of natural waters: Application to retrieval of phytoplankton pigments, I. Levin, E. Levina, G. Gilbert and S. Stewart, 95:264
- ReSeDA**
- Retrieval of evapotranspiration over the Alpilles/ReSeDA experimental site using airborne POLDER sensor and a thermal camera, M. Gómez, A. Olioso, J.A. Sobrino and F. Jacob, 96:399
- Retrieval algorithm robustness**
- Operational algorithm for the retrieval of water quality in the Great Lakes, D. Pozdnyakov, R. Shuchman, A. Korosov and C. Hatt, 97:352
- Rio Grande**
- Predicting riparian evapotranspiration from MODIS vegetation indices and meteorological data, P.L. Nagler, J. Cleverly, E. Glenn, D. Lampkin, A. Huete and Z. Wan, 94:17
- Riparian**
- Evapotranspiration on western U.S. rivers estimated using the Enhanced Vegetation Index from MODIS and data from eddy covariance and Bowen ratio flux towers, P.L. Nagler, R.L. Scott, C. Westenberg, J.R. Cleverly, E.P. Glenn and A.R. Huete, 97:337
- Riparian restoration**
- A local-scale, high-resolution evapotranspiration mapping algorithm (ETMA) with hydroecological applications at riparian meadow restoration sites, S.P. Loheide II and S.M. Gorelick, 98:182
- Ripple marks**
- Characterisation of surface roughness and sediment texture of intertidal flats using ERS SAR imagery, D. van der Wal, P.M.J. Herman and A. Wielemaker-van den Dool, 98:96
- River channel**
- Effects of channel morphology and sensor spatial resolution on image-derived depth estimates, C.J. Legleiter and D.A. Roberts, 95:231
- Roads**
- Survival analysis of a neotropical rainforest using multitemporal satellite imagery, J.A. Greenberg, S.C. Kefauver, H.C. Stimson, C.J. Yeaton and S.L. Ustin, 96:202
- Rocks**
- Lithologic mapping of the Mordor, NT, Australia ultramafic complex by using the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER), L.C. Rowan, J.C. Mars and C.J. Simpson, 99:105
- Roughness**
- Evaluation of a rough soil surface description with ASAR-ENVISAT radar data, M. Zribi, N. Baghdadi, N. Holah, O. Fafin and C. Guérin, 95:67
- RowMCRM**
- Assessing vineyard condition with hyperspectral indices: Leaf and canopy reflectance simulation in a row-structured discontinuous canopy, P.J. Zarco-Tejada, A. Berjón, R. López-Lozano, J.R. Miller, P. Martin, V. Cachorro, M.R. González and A. de Frutos, 99:271

RSR

Retrieval of leaf area index for a coniferous forest by inverting a forest reflectance model, M. Rautiainen, 99:295

Rule image

Optimal field sampling for targeting minerals using hyperspectral data, P. Debba, F.J.A. van Ruitenbeek, F.D. van der Meer, E.J.M. Carranza and A. Stein, 99:373

Runoff

Comparison between the interannual variability of snow parameters derived from SSM/I and the Ob river discharge, M. Grippa, N. Mognard and T. Le Toan, 98:35

Sahara

Mapping North African landforms using continental scale unmixing of MODIS imagery, J.-A.C. Ballantine, G.S. Okin, D.E. Prentiss and D.A. Roberts, 97:470

Sahel

Using coarse remote sensing radar observations to control the trajectory of a simple Sahelian land surface model, L. Jarlan, E. Mougin, P. Mazzega, M. Schoenauer, Y. Tracol, P. Hiernaux, 94:269

Land surface parameter monitoring with ERS scatterometer data over the Sahel: A comparison between agro-pastoral and pastoral areas, S. Zine, L. Jarlan, P.-L. Frison, E. Mougin, P. Hiernaux and J.-P. Rudant, 96:438

Mapping North African landforms using continental scale unmixing of MODIS imagery, J.-A.C. Ballantine, G.S. Okin, D.E. Prentiss and D.A. Roberts, 97:470

SAIL

Application of MODIS derived parameters for regional crop yield assessment, P.C. Doraiswamy, T.R. Sinclair, S. Hollinger, B. Akhmedov, A. Stern and J. Prueger, 97:192

SAIL-2

Estimating light absorption by chlorophyll, leaf and canopy in a deciduous broadleaf forest using MODIS data and a radiative transfer model, Q. Zhang, X. Xiao, B. Braswell, E. Linder, F. Baret and B. Moore III, 99:357

Saltcedar

Evapotranspiration on western U.S. rivers estimated using the Enhanced Vegetation Index from MODIS and data from eddy covariance and Bowen ratio flux towers, P.L. Nagler, R.L. Scott, C. Westenberg, J.R. Cleverly, E.P. Glenn and A.R. Huete, 97:337

Sampling

Optimization of sampling schemes for vegetation mapping using fuzzy classification, R. Tapia, A. Stein and W. Bijker, 99:425

SAR

Computer-based identification and tracking of Antarctic icebergs in SAR images, T.A.M. Silva and G.R. Bigg, 94:287

Carbon budget estimation in Central Amazonia: Successional forest modeling from remote sensing data, T. Neeff, P.M. de Alencastro Graça, L.V. Dutra and C. da Costa Freitas, 94:508

Characterisation of surface roughness and sediment texture of intertidal flats using ERS SAR imagery, D. van der Wal, P.M.J. Herman and A. Wielemaker-van den Dool, 98:96

Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments, G. Metternicht, L. Humi and R. Gogu, 98:284

SAR image photo interpretation

Efficiency of crop identification based on optical and SAR image time series, X. Blaes, L. Vanhalle and P. Defourny, 96:352

SAR interferometry

Mapping regional land displacements in the Venice coastland by an integrated monitoring system, P. Teatini, L. Tosi, T. Strozzi, L. Carbognin, U. Wegmüller and F. Rizzetto, 98:403

SAR-optical image complementarity

Efficiency of crop identification based on optical and SAR image time series, X. Blaes, L. Vanhalle and P. Defourny, 96:352

Satellite

Field work and statistical analyses for enhanced interpretation of satellite fire data, M.F. Cardoso, G.C. Hurtt, B. Moore III, C.A. Nobre and H. Bain, 96:212

Satellite altimetry

Seasonal and interannual variability of surface circulation in the Cape Verde region from 8 years of merged T/P and ERS-2 altimeter data, C. Lázaro, M.J. Fernandes, A.M.P. Santos and P. Oliveira, 98:45

Satellite imagery

Retrospective seagrass change detection in a shallow coastal tidal Australian lake, A.G. Dekker, V.E. Brando and J.M. Anstee, 97:415

Satellite images

Application of an edge detection method to satellite images for distinguishing sea surface temperature fronts near the Japanese coast, T. Shimada, F. Sakaida, H. Kawamura and T. Okumura, 98:21

Estimating phytoplankton biomass in coastal waters of Alaska using airborne remote sensing, M.A. Montes-Hugo, K. Carder, R.J. Foy, J. Cannizzaro, E. Brown and S. Pegau, 98:481

Satellite imaging

Classification of Amazonian primary rain forest vegetation using Landsat ETM+ satellite imagery, K.J. Salovaara, S. Thessler, R.N. Malik and H. Tuomisto, 97:39

Satellite optical images

Surface motion of mountain glaciers derived from satellite optical imagery, E. Berthier, H. Vardon, D. Baratoux, Y. Arnaud, C. Vincent, K.L. Feigl, F. Rémy and B. Legré, 95:14

Satellite remote sensing

Improving soil wetness variations monitoring from passive microwave satellite data: The case of April 2000 Hungary flood, T. Lacava, V. Cuomo, E.V. Di Leo, N. Pergola, F. Romano and V. Tramutoli, 96:135

Satellite validation

An improved in-situ bio-optical data set for ocean color algorithm development and satellite data product validation, P.J. Werdell and S.W. Bailey, 98:122

Satsuma-Iwojima

Discolored seawater detection using ASTER reflectance products: A case study of Satsuma-Iwojima, Japan, M. Urai and S. Machida, 99:95

Savanna fires

Spatiotemporal problems with detecting and mapping mosaic fire regimes with coarse-resolution satellite data in savanna environments, P.S. Laris, 99:412

Savannah

Testing the potential of multi-spectral remote sensing for retrospectively estimating fire severity in African Savannahs, A.M.S. Smith, M.J. Wooster, N.A. Drake, F.M. Dipotso, M.J. Falkowski and A.T. Hudak, 97:92

Scale

Assessment of ASTER land cover and MODIS NDVI data at multiple scales for ecological characterization of an arid urban center, W.L. Stefanov and M. Netzbund, 99:31

Scale of reliability

Use of SPOT 5 for mapping seagrasses: An application to *Posidonia oceanica*, V. Pasqualini, C. Pergent-Martini, G. Pergent, M. Agreil, G. Skoufias, L. Sourbes and A. Tsirika, 94:39

Scaling-up

Assessing vineyard condition with hyperspectral indices: Leaf and canopy reflectance simulation in a row-structured discontinuous canopy, P.J. Zarco-Tejada, A. Berjón, R. López-Lozano, J.R. Miller, P. Martín, V. Cachorro, M.R. González and A. de Frutos, 99:271

Scanning Multichannel Microwave Radiometer

Seasat—A 25-year legacy of success, D.L. Evans, W. Alpers, A. Cazenave, C. Elachi, T. Farr, D. Glackin, B. Holt, L. Jones, W.T. Liu, W. McCandless, Y. Menard, R. Moore and E. Njoku, 94:384

Scanning Multichannel Microwave Radiometer (SMMR)

Factors affecting remotely sensed snow water equivalent uncertainty, J. Dong, J.P. Walker and P.R. Houser, 97:68

Scattering

Estimating suspended sediment concentrations from ocean colour measurements in moderately turbid waters; the impact of variable particle scattering properties, C.E. Binding, D.G. Bowers and E.G. Mitchelson-Jacob, 94:373

Scatterometer winds

Characteristics of atmospheric divergence and convergence in the Indian Ocean inferred from scatterometer winds, A.J. Luis and P.C. Pandey, 97:231

Scatterometer/radiometer data classification

Classification of new-ice in the Greenland Sea using Satellite SSM/I radiometer and SeaWinds scatterometer data and comparison with ice model, R. Tonboe and L. Toudal, 97:277

Scots pine

Remote sensing of sunlight-induced chlorophyll fluorescence and reflectance of Scots pine in the boreal forest during spring recovery, J. Louis, A. Ounis, J.-M. Ducruet, S. Evain, T. Laurila, T. Thum, M. Aurela, G. Wingsle, L. Alonso, R. Pedros and I. Moya, 96:37

Retrieval of leaf area index for a coniferous forest by inverting a forest reflectance model, M. Rautiainen, 99:295

Sea ice

Classification of new-ice in the Greenland Sea using Satellite SSM/I radiometer and SeaWinds scatterometer data and comparison with ice model, R. Tonboe and L. Toudal, 97:277

Sea-ice concentration

Accuracy assessment of sea-ice concentrations from MODIS using in-situ measurements, C. Drüe and G. Heinemann, 95:139

Sea level anomaly

Seasonal and interannual variability of surface circulation in the Cape Verde region from 8 years of merged T/P and ERS-2 altimeter data, C. Lázaro, M.J. Fernandes, A.M.P. Santos and P. Oliveira, 98:45

Sea surface emissivity

In situ angular measurements of thermal infrared sea surface emissivity—Validation of models, R. Niclós, E. Valor, V. Caselles, C. Coll and J.M. Sánchez, 94:83

Sea surface temperature

In situ angular measurements of thermal infrared sea surface emissivity—Validation of models, R. Niclós, E. Valor, V. Caselles, C. Coll and J.M. Sánchez, 94:83

Diurnal variations in AVHRR SST fields: A strategy for removing warm layer effects from daily images, B.B. Nardelli, S. Marullo and R. Santoleri, 95:47

Analysis of along track scanning radiometer-2 (ATSR-2) data for clouds, glint and sea surface temperature using neural networks, J.J. Simpson, Y.L.(Ben) Tsou, A. Schmidt and A. Harris, 98:152

Sea surface temperature fronts

Application of an edge detection method to satellite images for distinguishing sea surface temperature fronts near the Japanese coast, T. Shimada, F. Sakaida, H. Kawamura and T. Okumura, 98:21

SeaBASS

An improved in-situ bio-optical data set for ocean color algorithm development and satellite data product validation, P.J. Werdell and S.W. Bailey, 98:122

Seagrass

Use of SPOT 5 for mapping seagrasses: An application to *Posidonia oceanica*, V. Pasqualini, C. Pergent-Martini, G. Pergent, M. Agreil, G. Skoufias, L. Sourbes and A. Tsirika, 94:39

Seasat

Seasat—A 25-year legacy of success, D.L. Evans, W. Alpers, A. Cazenave, C. Elachi, T. Farr, D. Glackin, B. Holt, L. Jones, W.T. Liu, W. McCandless, Y. Menard, R. Moore and E. Njoku, 94:384

Seasonal and interannual variations

Seasonal and interannual variability of surface circulation in the Cape Verde region from 8 years of merged T/P and ERS-2 altimeter data, C. Lázaro, M.J. Fernandes, A.M. P. Santos and P. Oliveira, 98:45

Seasonal-mosaic

Spatiotemporal problems with detecting and mapping mosaic fire regimes with coarse-resolution satellite data in savanna environments, P.S. Laris, 99:412

Sea-spectral reflectance

Stormwater runoff plumes observed by SeaWiFS radiometer in the Southern California Bight, N.P. Nezlin, P.M. DiGiacomo, E.D. Stein and D. Ackerman, 98:494

SeaWiFS

Consistent merging of satellite ocean color data sets using a bio-optical model, S. Maritorena and D.A. Siegel, 94:429

Satellite-derived parameters for biological modelling in coastal waters: Illustration over the eastern continental shelf of the Bay of Biscay, F. Gohin, S. Loyer, M. Lunven, C. Labry, J.-M. Froidefond, D. Delmas, M. Huret and A. Herbland, 95:29

Evaluation of SeaWiFS chlorophyll algorithms in the Southwestern Atlantic and Southern Oceans, C.A.E. Garcia, V.M.T. Garcia and C.R. McClain, 95:125

Assessing the potential of SeaWiFS and MODIS for estimating chlorophyll concentration in turbid productive waters using red and near-infrared bands, G. Dall'Olmo, A.A. Gitelson, D.C. Rundquist, B. Leavitt, T. Barrow and J.C. Holz, 96:176

Detection method of the Kuroshio front using the satellite-derived chlorophyll-a images, W. Takahashi and H. Kawamura, 97:83

Red tide detection and tracing using MODIS fluorescence data: A regional example in SW Florida coastal waters, C. Hu, F.E. Muller-Karger, C.(Judd) Taylor, K.L. Carder, C. Kelble, E. Johns and C.A. Heil, 97:311

Operational algorithm for the retrieval of water quality in the Great Lakes, D. Pozdnyakov, R. Shuchman, A. Korosov and C. Hatt, 97:352

An improved in-situ bio-optical data set for ocean color algorithm development and satellite data product validation, P.J. Werdell and S.W. Bailey, 98:122

Estimating phytoplankton biomass in coastal waters of Alaska using airborne remote sensing, M.A. Montes-Hugo, K. Carder, R.J. Foy, J. Cannizzaro, E. Brown and S. Pegau, 98:481

Secchi depth

Influence of lake morphology and clarity on water surface temperature as measured by EOS ASTER, M.W. Becker and A. Daw, 99:288

Secondary forest

Carbon budget estimation in Central Amazonia: Successional forest modeling from remote sensing data, T. Neeff, P.M. de Alencastro Graça, L.V. Dutra and C. da Costa Freitas, 94:508

Sediment

Satellite-derived parameters for biological modelling in coastal waters: Illustration over the eastern continental shelf of the Bay of Biscay, F. Gohin, S. Loyer, M. Lunven, C. Labry, J.-M. Froidefond, D. Delmas, M. Huret and A. Herbland, 95:29

Sediment grain-size

Characterisation of surface roughness and sediment texture of intertidal flats using ERS SAR imagery, D. van der Wal, P.M.J. Herman and A. Wielemaker-van den Dool, 98:96

Sediment pollution

Airborne laser scanning for riverbank erosion assessment, D.P. Thoma, S.C. Gupta, M.E. Bauer and C.E. Kirchoff, 95:493

Selective logging

Combining spectral and spatial information to map canopy damage from selective logging and forest fires, C.M. Souza Jr., D.A. Roberts and M.A. Cochrane, 98:329

Semi-arid

A comparison of methods for estimating fractional green vegetation cover within a desert-to-upland transition zone in central New Mexico, USA, J. Xiao and A. Moody, 98:237

Senescence

Determination of phenological dates in boreal regions using normalized difference water index, N. Delbart, L. Kergoat, T. Le Toan, J. Lhermitte and G. Picard, 97:26

Sensible heat flux

Analysis of urban heat-island effect using ASTER and ETM+ Data: Separation of anthropogenic heat discharge and natural heat radiation from sensible heat flux, S. Kato and Y. Yamaguchi, 99:44

Sensor calibration

Extension of retrospective datasets using multiple sensors. An approach to radiometric intercalibration of Landsat TM and MSS data, A. Röder, T. Kuemmerle and J. Hill, 95:195

Sensor noise

Role of sensor noise in hyperspectral remote sensing of natural waters: Application to retrieval of phytoplankton pigments, I. Levin, E. Levina, G. Gilbert and S. Stewart, 95:264

SEVIRI

Assessing the potential of thermal infrared satellite surveys for monitoring seismically active areas: The case of Kocaeli (Izmit) earthquake, August 17, 1999, V. Tramutoli, V. Cuomo, C. Filizzola, N. Pergola and C. Pietrapertosa, 96:409

Shade

Multiple shadow fractions in spectral mixture analysis of a cotton canopy, G.J. Fitzgerald, P.J. Pinter Jr., D.J. Hunsaker and T.R. Clarke, 97:526

Shadow

Shadow allometry: Estimating tree structural parameters using hyperspatial image analysis, J.A. Greenberg, S.Z. Dobrowski and S.L. Ustin, 97:15

Shadows

Multiple shadow fractions in spectral mixture analysis of a cotton canopy, G.J. Fitzgerald, P.J. Pinter Jr., D.J. Hunsaker and T.R. Clarke, 97:526

Shoot scattering

Application of photon recollision probability in coniferous canopy reflectance simulations, M. Rautiainen and P. Stenberg, 96:98

Short-wave infrared

Determination of phenological dates in boreal regions using normalized difference water index, N. Delbart, L. Kergoat, T. Le Toan, J. Lhermitte and G. Picard, 97:26

Shortwave-infrared radiation

Ecosystem structure along bioclimatic gradients in Hawai'i from imaging spectroscopy, G.P. Asner, A.J. Elmore, R. Flint Hughes, A.S. Warner and P.M. Vitousek, 96:497

Siberia

Determination of phenological dates in boreal regions using normalized difference water index, N. Delbart, L. Kergoat, T. Le Toan, J. Lhermitte and G. Picard, 97:26

Signature extension

Signature extension through space for northern landcover classification: A comparison of radiometric correction methods, I. Olthof, C. Butson and R. Fraser, 95:290

Silica

Mapping variations in weight percent silica measured from multispectral thermal infrared imagery—Examples from the Hiller Mountains, Nevada, USA and Tres Virgenes-La Reforma, Baja California Sur, Mexico, S.J. Hook, J.E. Dmochowski, K.A. Howard, L.C. Rowan, K.E. Karlstrom and J.M. Stock, 95:273

Silicate

Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared "radiance-at-sensor" data, Y. Ninomiya, B. Fu and T.J. Cudahy, 99:127

Simulated annealing

Super-resolution land cover mapping using a Markov random field based approach, T. Kasetkasem, M.K. Arora and P.K. Varshney, 96:302

Optimal field sampling for targeting minerals using hyperspectral data, P. Debba, F.J.A. van Ruitenbeek, F.D. van der Meer, E.J.M. Carranza and A. Stein, 99:373

Optimization of sampling schemes for vegetation mapping using fuzzy classification, R. Tapia, A. Stein and W. Bijker, 99:425

SMEX02

Vegetation water content estimation for corn and soybeans using spectral indices derived from MODIS near- and short-wave infrared bands, D. Chen, J. Huang and T.J. Jackson, 98:225

SMMR

Quantifying the uncertainty in passive microwave snow water equivalent observations, J.L. Foster, C. Sun, J.P. Walker, R. Kelly, A. Chang, J. Dong and H. Powell, 94:187

SNOTEL

Statistical evaluation of remotely sensed snow-cover products with constraints from streamflow and SNOTEL measurements, X. Zhou, H. Xie and J.M.H. Hendrickx, 94:214

Snow

Accuracy assessment of the MODIS 16-day albedo product for snow: comparisons with Greenland in situ measurements, J. Stroeve, J.E. Box, F. Gao, S. Liang, A. Nolin and C. Schaaf, 94:46

Snow cover

Quantifying the uncertainty in passive microwave snow water equivalent observations, J.L. Foster, C. Sun, J.P. Walker, R. Kelly, A. Chang, J. Dong and H. Powell, 94:187

Statistical evaluation of remotely sensed snow-cover products with constraints from streamflow and SNOTEL measurements, X. Zhou, H. Xie and J.M.H. Hendrickx, 94:214

Snow cover extent

Evaluation of spring snow covered area depletion in the Canadian Arctic from NOAA snow charts, L. Wang, M. Sharp, R. Brown, C. Derksen and B. Rivard, 95:453

Snow depth

Comparison between the interannual variability of snow parameters derived from SSM/I and the Ob river discharge, M. Grippa, N. Mognard and T. Le Toan, 98:35

Snow event

Detecting and measuring new snow accumulation on ice sheets by satellite remote sensing, R. Bindshadler, H. Choi, C. Shuman and T. Markus, 98:388

Snow index

Glacial cover mapping (1987-1996) of the Cordillera Blanca (Peru) using satellite imagery, W. Silverio and J.-M. Jaquet, 95:342

Snow mapping

A feasible method for fractional snow cover mapping in boreal zone based on a reflectance model, S.J. Metsämäki, S.T. Anttila, H.J. Markus and J.M. Vepsäläinen, 95:77

Snow models

Modelling local distribution of an Arctic dwarf shrub indicates an important role for remote sensing of snow cover, P.S.A. Beck, E. Kalmbach, D. Joly, A. Stien and L. Nilsen, 98:110

Snow water equivalent

Quantifying the uncertainty in passive microwave snow water equivalent observations, J.L. Foster, C. Sun, J.P. Walker, R. Kelly, A. Chang, J. Dong and H. Powell, 94:187

Evaluation of passive microwave snow water equivalent retrievals acR. the boreal forest/tundra transition of western Canada, C. Derksen, A. Walker and B. Goodison, 96:315

Snow water equivalent (SWE)

Factors affecting remotely sensed snow water equivalent uncertainty, J. Dong, J.P. Walker and P.R. Houser, 97:68

Snow-covered area

A feasible method for fractional snow cover mapping in boreal zone based on a reflectance model, S.J. Metsämäki, S.T. Anttila, H.J. Markus and J.M. Vepsäläinen, 95:77

Using MODIS snow cover maps in modeling snowmelt runoff process in the eastern part of Turkey, A. Emre Tekeli, Z. Akyürek, A. Arda Şorman, A. Şensoy and A. Ünal Şorman, 97:216

Snowfall

Detecting and measuring new snow accumulation on ice sheets by satellite remote sensing, R. Bindshadler, H. Choi, C. Shuman and T. Markus, 98:388

Snowmelt

Comparison between the interannual variability of snow parameters derived from SSM/I and the Ob river discharge, M. Grippa, N. Mognard and T. Le Toan, 98:35

Snowmelt runoff

Using MODIS snow cover maps in modeling snowmelt runoff process in the eastern part of Turkey, A. Emre Tekeli, Z. Akyürek, A. Arda Şorman, A. Şensoy and A. Ünal Şorman, 97:216

Snowmelt runoff model (SRM)

Using MODIS snow cover maps in modeling snowmelt runoff process in the eastern part of Turkey, A. Emre Tekeli, Z. Akyürek, A. Arda Şorman, A. Şensoy and A. Ünal Şorman, 97:216

Soft classification

Decision tree regression for soft classification of remote sensing data, M. Xu, P. Watanachaturaporn, P.K. Varshney and M.K. Arora, 97:322

Soil exposure

Indicators of plant species richness in AVIRIS spectra of a mesic grassland, G.A. Carter, A.K. Knapp, J.E. Anderson, G.A. Hoch and M.D. Smith, 98:304

Soil heat flux

Retrieval of evapotranspiration over the Alpillis/ReSeDA experimental site using airborne POLDER sensor and a thermal camera, M. Gómez, A. Olioso, J.A. Sobrino and F. Jacob, 96:399

Soil moisture

Potential of ASAR/ENVISAT for the characterization of soil surface parameters over bare agricultural fields, N. Holah, N. Baghdadi, M. Zribi, A. Bruand and C. King, 96:78

Improving soil wetness variations monitoring from passive microwave satellite data: The case of April 2000 Hungary flood, T. Lacava, V. Cuomo, E.V. Di Leo, N. Pergola, F. Romano and V. Tramutoli, 96:135

New methodology for soil surface moisture estimation and its application to ENVISAT-ASAR multi-incidence data inversion, M. Zribi, N. Baghdadi, N. Holah and O. Fafin, 96:485

Soil reflectance index (SRI)

A hybrid inversion method for mapping leaf area index from MODIS data: experiments and application to broadleaf and needleleaf canopies, H. Fang and S. Liang, 94:405

Soil surface roughness

Potential of ASAR/ENVISAT for the characterization of soil surface parameters over bare agricultural fields, N. Holah, N. Baghdadi, M. Zribi, A. Bruand and C. King, 96:78

Soil water content measurement

Ground-penetrating radar measurement of crop and surface water content dynamics, G. Serbin and D. Or, 96:119

Solar radiation

A simple method for removing 3-D radiative effects in satellite retrievals of surface irradiance, K. Wyser, W. O'Hirok and C. Gautier, 94:335

Southern California

Spatial and temporal patterns of remotely-sensed and field-measured rainfall in southern California, N.P. Nezlin and E.D. Stein, 96:228

Southern California Bight

Stormwater runoff plumes observed by SeaWiFS radiometer in the Southern California Bight, N.P. Nezlin, P.M. DiGiacomo, E.D. Stein and D. Ackerman, 98:494

Southern Ocean

Evaluation of SeaWiFS chlorophyll algorithms in the Southwestern Atlantic and Southern Oceans, C.A.E. Garcia, V.M.T. Garcia and C.R. McClain, 95:125

Southwestern Atlantic Ocean

Evaluation of SeaWiFS chlorophyll algorithms in the Southwestern Atlantic and Southern Oceans, C.A.E. Garcia, V.M.T. Garcia and C.R. McClain, 95:125

Spatial analysis

Spatial analysis of global urban extent from DMSP-OLS night lights, C. Small, F. Pozzi and C.D. Elvidge, 96:277

Spatial modelling

Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments, G. Metternicht, L. Humi and R. Gogu, 98:284

Spatial organisation of line sets

The use of Remote Sensing techniques and empirical tectonic models for inference of geological structures: Bridging from regional to local scales, P.C. Fernandes da Silva, J.C. Cripps and S.M. Wise, 96:18

Spatial patterns

Comparison of burned area estimates derived from SPOT-VEGETATION and Landsat ETM+ data in Africa: Influence of spatial pattern and vegetation type, J.M.N. Silva, A.C.L. Sá and J.M.C. Pereira, 96:188

Spatial point pattern

Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height, T. Neeff, G.S. Biging, L.V. Dutra, C.C. Freitas and J.R. dos Santos, 97:484

Spatial scale

On the choice of spatial and categorical scale in remote sensing land cover classification, J. Ju, S. Gopal and E.D. Kolaczyk, 96:62

Spatial segmentation

Multitemporal censusing of a population of eastern hemlock (*Tsuga canadensis* L.) from remotely sensed imagery using an automated segmentation and reconciliation procedure, W.R. Lamar, J.B. McGraw and T.A. Warner, 94:133

Spatial variability

Indicators of plant species richness in AVIRIS spectra of a mesic grassland, G.A. Carter, A.K. Knapp, J.E. Anderson, G.A. Hoch and M.D. Smith, 98:304

Surface energy fluxes with the Advanced Spaceborne Thermal Emission and Reflection radiometer (ASTER) at the Iowa 2002 SMACEX site (USA), A.N. French, F. Jacob, M.C. Anderson, W.P. Kustas, W. Timmermans, A. Gieske, Z. Su, H. Su, M.F. McCabe, F. Li, J. Prueger and N. Brunsell, 99:55

Species classification

Automated tree recognition in old growth conifer stands with high resolution digital imagery, D.G. Leckie, F.A. Gougeon, S. Tinis, T. Nelson, C.N. Burnett and D. Paradine, 94:311

Spectra

Simple parameterizations of the radiation budget of uniform broadleaved and coniferous canopies, S. Smolander and P. Stenberg, 94:355

Spectral angle mapper

Hyperspectral discrimination of tropical rain forest tree species at leaf to crown scales, M.L. Clark, D.A. Roberts and D.B. Clark, 96:375

Optimal field sampling for targeting minerals using hyperspectral data, P. Debba, F.J.A. van Ruitenbeek, F.D. van der Meer, E.J.M. Carranza and A. Stein, 99:373

Spectral Angle Mapper

Discrimination of hoary cress and determination of its detection limits via hyperspectral image processing and accuracy assessment techniques, J.T. Mundt, N.F. Glenn, K.T. Weber, T.S. Prather, L.W. Lass and J. Pettingill, 96:509

Spectral feature fitting

Optimal field sampling for targeting minerals using hyperspectral data, P. Debba, F.J.A. van Ruitenbeek, F.D. van der Meer, E.J.M. Carranza and A. Stein, 99:373

Spectral indices

Spectral sensing of foliar water conditions in two co-occurring conifer species: *Pinus edulis* and *Juniperus monosperma*, H.C. Stimson, D.D. Breshears, S.L. Ustin and S.C. Kefauver, 96:108

Spectral invariant

Application of photon recollision probability in coniferous canopy reflectance simulations, M. Rautiainen and P. Stenberg, 96:98

Spectral library

Mapping microphytobenthos biomass by non-linear inversion of visible-infrared hyperspectral images, J.-P. Combe, P. Launeau, V. Carrère, D. Despan, V. Méléder, L. Barillé and C. Sotin, 98:371

Spectral mixing

Indicators of plant species richness in AVIRIS spectra of a mesic grassland, G.A. Carter, A.K. Knapp, J.E. Anderson, G.A. Hoch and M.D. Smith, 98:304

Spectral mixture analysis

Application of AVIRIS data in detection of oil-induced vegetation stress and cover change at Jornada, New Mexico, L. Li, S.L. Ustin and M. Lay, 94:1

Mapping lichen in a caribou habitat of Northern Quebec, Canada, using an enhancement-classification method and spectral mixture analysis, J. Théau, D.R. Peddle and C.R. Duguay, 94:232

Spectral unmixing of normalized reflectance data for the deconvolution of lichen and rock mixtures, J. Zhang, B. Rivard and A. Sánchez-Azofeifa, 95:57

Effects of channel morphology and sensor spatial resolution on image-derived depth estimates, C.J. Legleiter and D.A. Roberts, 95:231

Spectral mixture analysis for subpixel vegetation fractions in the urban environment: How to incorporate endmember variability?, C. Song, 95:248

Ecosystem structure along bioclimatic gradients in Hawai'i from imaging spectroscopy, G.P. Asner, A.J. Elmore, R. Flint Hughes, A.S. Warner and P.M. Vitousek, 96:497

Multiple shadow fractions in spectral mixture analysis of a cotton canopy, G.J. Fitzgerald, P.J. Pinter Jr., D.J. Hunsaker and T.R. Clarke, 97:526

A comparison of methods for estimating fractional green vegetation cover within a desert-to-upland transition zone in central New Mexico, USA, J. Xiao and A. Moody, 98:237

Combining spectral and spatial information to map canopy damage from selective logging and forest fires, C.M. Souza Jr., D.A. Roberts and M.A. Cochrane, 98:329

Spectral reflectance

Detecting near-surface moisture stress in *Sphagnum* spp., A. Harris, R.G. Bryant and A.J. Baird, 97:371

Lithologic mapping of the Mordor, NT, Australia ultramafic complex by using the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER), L.C. Rowan, J.C. Mars and C.J. Simpson, 99:105

Spectral remote sensing

Spectral sensing of foliar water conditions in two co-occurring conifer species: *Pinus edulis* and *Juniperus monosperma*, H.C. Stimson, D.D. Breshears, S.L. Ustin and S.C. Kefauver, 96:108

Spectral response

Mapping dry/wet snow cover in the Indian Himalayas using IRS multispectral imagery, R.P. Gupta, U.K. Haritashya and P. Singh, 97:458

Sphagnum

Detecting near-surface moisture stress in *Sphagnum* spp., A. Harris, R.G. Bryant and A.J. Baird, 97:371

Spiral curve

Ganges and Indus river basin land use/land cover (LULC) and irrigated area mapping using continuous streams of MODIS data, P.S. Thenkabail, M. Schull and H. Turrall, 95:317

Split-window

Ground measurements for the validation of land surface temperatures derived from AATSR and MODIS data, C. Coll, V. Caselles, J.M. Galve, E. Valor, R. Niclòs, J.M. Sánchez and R. Rivas, 97:288

SPOT 5

Use of SPOT 5 for mapping seagrasses: An application to *Posidonia oceanica*, V. Pasqualini, C. Pergent-Martini, G. Coll, V. Caselles, J.M. Galve, E. Valor, R. Niclòs, J.M. Sánchez and R. Rivas, 97:288

Surface motion of mountain glaciers derived from satellite optical imagery, E. Berthier, H. Vadon, D. Baratoux, Y. Arnaud, C. Vincent, K.L. Feigl, F. Rémy and B. Legrésy, 95:14

SPOT VEGETATION

Determination of phenological dates in boreal regions using normalized difference water index, N. Delbart, L. Kergoat, T. Le Toan, J. Lhermitte and G. Picard, 97:26

SPOT-VEGETATION

Comparison of burned area estimates derived from SPOT-VEGETATION and Landsat ETM+ data in Africa: Influence of spatial pattern and vegetation type, J.M.N. Silva, A.C.L. Sá and J.M.C. Pereira, 96:188

Spectrum

BRDF measurement of understory vegetation in pine forests: dwarf shrubs, lichen, and moss, J.I. Peltoniemi, S. Kaasalainen, J. Näränen, M. Rautiainen, P. Stenberg, H. Smolander, S. Smolander and P. Voipio, 94:343

Spring melt

Evaluation of spring snow covered area depletion in the Canadian Arctic from NOAA snow charts, L. Wang, M. Sharp, R. Brown, C. Derksen and B. Rivard, 95:453

SRTM

Combination of SRTM3 and repeat ASTER data for deriving alpine glacier flow velocities in the Bhutan Himalaya, A. Kääb, 94:463

SS

Retrieval of Chlorophyll *a*, suspended solids, and colored dissolved organic matter in Tokyo Bay using ASTER data, M. Kishino, A. Tanaka and J. Ishizaka, 99:66

S-SEBI

Retrieval of evapotranspiration over the Alpilles/ReSeDA experimental site using airborne POLDER sensor and a thermal camera, M. Gómez, A. Olioso, J.A. Sobrino and F. Jacob, 96:399

SSM/I

Quantifying the uncertainty in passive microwave snow water equivalent observations, J.L. Foster, C. Sun, J.P. Walker, R. Kelly, A. Chang, J. Dong and H. Powell, 94:187

SSM/I

Detecting and measuring new snow accumulation on ice sheets by satellite remote sensing, R. Bindaschadler, H. Choi, C. Shuman and T. Markus, 98:388

SST

Detection method of the Kuroshio front using the satellite-derived chlorophyll-*a* images, W. Takahashi and H. Kawamura, 97:83

Characteristics of atmospheric divergence and convergence in the Indian Ocean inferred from scatterometer winds, A.J. Luis and P.C. Pandey, 97:231

Stand

Patterns of covariance between forest stand and canopy structure in the Pacific Northwest, M.A. Lefsky, A.T. Hudak, W.B. Cohen and S.A. Acker, 95:517

STAR

Application of photon recollision probability in coniferous canopy reflectance simulations, M. Rautiainen and P. Stenberg, 96:98

Stem density

Shadow allometry: Estimating tree structural parameters using hyperspatial image analysis, J.A. Greenberg, S.Z. Dobrowski and S.L. Ustin, 97:15

Stereo view

Stereo observation of lakes and coastal zones using ASTER imagery, J. Matthews, 99:16

Stereoscopic data

Estimating sub-pixel surface roughness using remotely sensed stereoscopic data, A. Mushkin and A.R. Gillespie, 99:75

Stratospheric ozone

Intercomparison of ground-based microwave remote sensing measurements of stratospheric ozone over the Mendoza region, Argentina with HALOE data, C.M. Puliafito and S.E. Puliafito, 94:61

Strauss process

Markov point processes for modeling of spatial forest patterns in Amazonia derived from interferometric height, T. Neeff, G.S. Biging, L.V. Dutra, C.C. Freitas and J.R. dos Santos, 97:484

Streamflow

Statistical evaluation of remotely sensed snow-cover products with constraints from streamflow and SNOTEL measurements, X. Zhou, H. Xie and J.M.H. Hendrickx, 94:214

Structural geology

Application of wavelet analysis to the study of spatial pattern of morphotectonic lineaments in digital terrain models. A case study, G. Jordan and B. Schott, 94:31

Structural models

Parametric (modified least squares) and non-parametric (Theil-Sen) linear regressions for predicting biophysical parameters in the presence of measurement errors, R. Fernandes and S.G. Leblanc, 95:303

Structure

Mapping forest structure for wildlife habitat analysis using waveform lidar: Validation of montane ecosystems, P. Hyde, R. Dubayah, B. Peterson, J.B. Blair, M. Hofton, C. Hunsaker, R. Knox and W. Walker, 96:427

Submarine volcano

Discolored seawater detection using ASTER reflectance products: A case study of Satsuma-Iwojima, Japan, M. Urai and S. Machida, 99:95

Submerged vegetation

Retrospective seagrass change detection in a shallow coastal tidal Australian lake, A.G. Dekker, V.E. Brando and J.M. Anstee, 97:415

Sub-pixel classification

Comparison of non-linear mixture models: sub-pixel classification, W. Liu and E.Y. Wu, 94:145

Subsidence

Mapping ground subsidence induced by aquifer overexploitation using advanced Differential SAR Interferometry: Vega Media of the Segura River (SE Spain) case study, R. Tomás, Y. Márquez, J.M. Lopez-Sanchez, J. Delgado, P. Blanco, J.J. Mallorquí, M. Martínez, G. Herrera and J. Mulas, 98:269

Subtropical convergence

Intercomparison of ocean colour band-ratio algorithms for chlorophyll concentration in the Subtropical Front east of New Zealand, M.H. Pinkerton, K.M. Richardson, P.W. Boyd, M.P. Gall, J. Zeldis, M.D. Oliver and R.J. Murphy, 97:382

Subtropical front

Intercomparison of ocean colour band-ratio algorithms for chlorophyll concentration in the Subtropical Front east of New Zealand, M.H. Pinkerton, K.M. Richardson, P.W. Boyd, M.P. Gall, J. Zeldis, M.D. Oliver and R.J. Murphy, 97:382

Sugarcane varieties

Discrimination of sugarcane varieties in Southeastern Brazil with EO-1 Hyperion data, L.S. Galvão, A.R. Formaggio and D.A. Tisot, 94:523

Sunlight-induced chlorophyll fluorescence

Remote sensing of sunlight-induced chlorophyll fluorescence and reflectance of Scots pine in the boreal forest during spring recovery, J. Louis, A. Ounis, J.-M. Ducruet, S. Evain, T. Laurila, T. Thum, M. Aurela, G. Wingsle, L. Alonso, R. Pedros and I. Moya, 96:37

Super-resolution land cover mapping

Super-resolution land cover mapping using a Markov random field based approach, T. Kasetkasem, M.K. Arora and P.K. Varshney, 96:302

Surface currents

Characterizing partial upwellings and surface circulation at Lake Tahoe, California-Nevada, USA with thermal infrared images, T.E. Steissberg, S.J. Hook and S.G. Schladow, 99:2

Surface displacement

Surface motion of mountain glaciers derived from satellite optical imagery, E. Berthier, H. Vadon, D. Baratoux, Y. Arnaud, C. Vincent, K.L. Feigl, F. Rémy and B. Legrésy, 95:14

Surface emissivity

Separating surface emissivity and temperature using two-channel spectral indices and emissivity composites and comparison with a vegetation fraction method, P. Dash, F.-M. Göttsche, F.-S. Olesen and H. Fischer, 96:1

Surface energy balance modeling

Surface energy fluxes with the Advanced Spaceborne Thermal Emission and Reflection radiometer (ASTER) at the Iowa 2002 SMACEX site (USA), A.N. French, F. Jacob, M.C. Anderson, W.P. Kustas, W. Timmermans, A. Gieske, Z. Su, H. Su, M.F. McCabe, F. Li, J. Prueger and N. Brunzell, 99:55

Surface radiation budget

A simple method for removing 3-D radiative effects in satellite retrievals of surface irradiance, K. Wyser, W. O'Hirok and C. Gautier, 94:335

Surface reflectance

Testing the potential of multi-spectral remote sensing for retrospectively estimating fire severity in African Savannas, A.M.S. Smith, M.J. Wooster, N.A. Drake, F.M. Dipotso, M.J. Falkowski and A.T. Hudak, 97:92

Image-based atmospheric correction of QuickBird imagery of Minnesota cropland, J. Wu, D. Wang and M.E. Bauer, 99:315

Surface roughness

Characterisation of surface roughness and sediment texture of intertidal flats using ERS SAR imagery, D. van der Wal, P.M.J. Herman and A. Wielemaker-van den Dool, 98:96

Estimating sub-pixel surface roughness using remotely sensed stereoscopic data, A. Mushkin and A.R. Gillespie, 99:75

Surface temperature

Extending surface temperature and emissivity retrieval to the mid-infrared (3-5 μm) using the Multispectral Thermal Imager (MTI), A. Mushkin, L.K. Balick and A.R. Gillespie, 98:141

Survival analysis

Survival analysis of a neotropical rainforest using multitemporal satellite imagery, J.A. Greenberg, S.C. Kefauver, H.C. Stimson, C.J. Yeaton and S.L. Ustin, 96:202

Suspended sediments

Estimating suspended sediment concentrations from ocean colour measurements in moderately turbid waters; the impact of variable particle scattering properties, C.E. Binding, D.G. Bowers and E.G. Mitchelson-Jacob, 94:373

SWIR

Ecosystem structure along bioclimatic gradients in Hawai'i from imaging spectroscopy, G.P. Asner, A.J. Elmore, R. Flint Hughes, A.S. Warner and P.M. Vitousek, 96:497

Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns, E.J. Laurent, H. Shi, D. Gatzolis, J.P. LeBouton, M.B. Walters and J. Liu, 97:249

Switzerland

Remote sensing of landslides: An analysis of the potential contribution to geo-spatial systems for hazard assessment in mountainous environments, G. Metternicht, L. Hurni and R. Gogu, 98:284

Synthetic aperture radar

Oil spill detection by satellite remote sensing, C. Brekke and A.H.S. Solberg, 95:1

Wake effects of large offshore wind farms identified from satellite SAR, M.B. Christiansen and C.B. Hasager, 98:251

Synthetic Aperture Radar

Seasat—A 25-year legacy of success, D.L. Evans, W. Alpers, A. Cazenave, C. Elachi, T. Farr, D. Glackin, B. Holt, L. Jones, W.T. Liu, W. McCandless, Y. Menard, R. Moore and E. Njoku, 94:384

Tamarix

Predicting riparian evapotranspiration from MODIS vegetation indices and meteorological data, P.L. Nagler, J. Cleverly, E. Glenn, D. Lampkin, A. Huete and Z. Wan, 94:17

Tasseled cap

Comparison of Tasseled Cap-based Landsat data structures for use in forest disturbance detection, S.P. Healey, W.B. Cohen, Y. Zhiqiang and O.N. Krankina, 97:301

Tasseled cap wetness

Comparison of time series tasseled cap wetness and the normalized difference moisture index in detecting forest disturbances, S. Jin and S.A. Sader, 94:364

Tectonic geomorphology

Application of wavelet analysis to the study of spatial pattern of morphotectonic lineaments in digital terrain models. A case study, G. Jordan and B. Schott, 94:31

Tectonic structures

The use of Remote Sensing techniques and empirical tectonic models for inference of geological structures: Bridging from regional to local scales, P.C. Fernandes da Silva, J.C. Cripps and S.M. Wise, 96:18

Temporal

Evaluation of seasonal variation of MODIS derived leaf area index at two European deciduous broadleaf forest sites, Q. Wang, J. Tenhunen, N.Q. Dinh, M. Reichstein, D. Otieno, A. Granier and K. Pilegarrrd, 96:475

Temporal scale

On the relationship of NDVI with leaf area index in a deciduous forest site, Q. Wang, S. Adiku, J. Tenhunen and A. Granier, 94:244

Temporally invariant cluster

A simple and effective radiometric correction method to improve landscape change detection across sensors and across time, X. Chen, L. Vierling and D. Deering, 98:63

Terra

The value of multiangle measurements for retrieving structurally and radiatively consistent properties of clouds, aerosols, and surfaces, D.J. Diner, B.H. Braswell, R. Davies, N. Gobron, J. Hu, Y. Jin, R.A. Kahn, Y. Knyazikhin, N. Loeb, J.-P. Muller, A.W. Nolin, B. Pinty, C.B. Schaaf, G. Seiz and J. Stroeve, 97:495

Mineral mapping on the Chilean-Bolivian Altiplano using co-orbital ALI, ASTER and Hyperion imagery: Data dimensionality issues and solutions, B.E. Hubbard and J.K. Crowley, 99:173

TERRA

Aerosol optical thickness determination by exploiting the synergy of TERRA and AQUA MODIS, J. Tang, Y. Xue, T. Yu and Y. Guan, 94:327

TERRA-ASTER

Combination of SRTM3 and repeat ASTER data for deriving alpine glacier flow velocities in the Bhutan Himalaya, A. Käab, 94:463

Thaw lakes

Satellite remote sensing classification of thaw lakes and drained thaw lake basins on the North Slope of Alaska, R.C. Frohn, K.M. Hinkel and W.R. Eisner, 97:116

The Kuroshio

Detection method of the Kuroshio front using the satellite-derived chlorophyll-a images, W. Takahashi and H. Kawamura, 97:83

Theil-sen

Parametric (modified least squares) and non-parametric (Theil-Sen) linear regressions for predicting biophysical parameters in the presence of measurement errors, R. Fernandes and S.G. Leblanc, 95:303

Thermal anomalies

Assessing the potential of thermal infrared satellite surveys for monitoring seismically active areas: The case of Kocaeli (İzmit) earthquake, August 17, 1999, V. Tramutoli, V. Cuomo, C. Filizzola, N. Pergola and C. Pietrapertosa, 96:409

Thermal imagery

A local-scale, high-resolution evapotranspiration mapping algorithm (ETMA) with hydroecological applications at riparian meadow restoration sites, S.P. Loheide II and S.M. Gorelick, 98:182

Thermal infrared

In situ angular measurements of thermal infrared sea surface emissivity—Validation of models, R. Niclós, E. Valor, V. Caselles, C. Coll and J.M. Sánchez, 94:83

Separating surface emissivity and temperature using two-channel spectral indices and emissivity composites and comparison with a vegetation fraction method, P. Dash, F.-M. Göttsche, F.-S. Olesen and H. Fischer, 96:1

Characterizing partial upwellings and surface circulation at Lake Tahoe, California-Nevada, USA with thermal infrared images, T.E. Steissberg, S.J. Hook and S.G. Schladow, 99:2

Surface energy fluxes with the Advanced Spaceborne Thermal Emission and Reflection radiometer (ASTER) at the Iowa 2002 SMACEX site (USA), A.N. French, F. Jacob, M.C. Anderson, W.P. Kustas, W. Timmermans, A. Gieske, Z. Su, H. Su, M.F. McCabe, F. Li, J. Prueger and N. Brunsell, 99:55

Detecting lithology with Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) multispectral thermal infrared "radiance-at-sensor" data, Y. Ninomiya, B. Fu and T.J. Cudahy, 99:127

Surface mineral mapping at Steamboat Springs, Nevada, USA, with multi-wavelength thermal infrared images, R.G. Vaughan, S.J. Hook, W.M. Calvin and J.V. Taranik, 99:140

Influence of lake morphology and clarity on water surface temperature as measured by EOS ASTER, M.W. Becker and A. Daw, 99:288

Thermal infrared satellite

Assessing the potential of thermal infrared satellite surveys for monitoring seismically active areas: The case of Kocaeli (İzmit) earthquake, August 17, 1999, V. Tramutoli, V. Cuomo, C. Filizzola, N. Pergola and C. Pietrapertosa, 96:409

Thiel-Sen

Landsat-7 ETM+ radiometric normalization comparison for northern mapping applications, I. Olthof, D. Pouliot, R. Fernandes and R. Latifovic, 95:388

Time series

Identifying land cover variability distinct from land cover change: Cheatgrass in the Great Basin, B.A. Bradley and J.F. Mustard, 94:204

Extension of retrospective datasets using multiple sensors. An approach to radiometric intercalibration of Landsat TM and MSS data, A. Röder, T. Kuemmerle and J. Hill, 95:195

Prototyping a global algorithm for systematic fire-affected area mapping using MODIS time series data, D.P. Roy, Y. Jin, P.E. Lewis and C.O. Justice, 97:137

Image masking for crop yield forecasting using AVHRR NDVI time series imagery, J.H. Kastens, T.L. Kastens, D.L.A. Kastens, K.P. Price, E.A. Martinko and R.-Y. Lee, 99:341

Time-series

On the relationship between training sample size and data dimensionality: Monte Carlo analysis of broadband multi-temporal classification, T.G. Van Niel, T.R. McVicar and B. Datt, 98:468

TIR

ASTER observations of thermal anomalies preceding the April 2003 eruption of Chikurachki volcano, Kurile Islands, Russia, D. Pieri and M. Abrams, 99:84

Tokyo Bay

Retrieval of Chlorophyll *a*, suspended solids, and colored dissolved organic matter in Tokyo Bay using ASTER data, M. Kishino, A. Tanaka and J. Ishizaka, 99:66

Topographic mapping

Quality of TOPSAR topographic data for volcanology studies at Kilauea Volcano, Hawaii: An assessment using airborne lidar data, P.J. Mouginis-Mark and H. Garbeil, 96:149

Topography

A data mining approach for understanding topographic control on climate-induced inter-annual vegetation variability over the United States, A.B. White, P. Kumar and D. Tcheng, 98:1

TOPSAR

Quality of TOPSAR topographic data for volcanology studies at Kilauea Volcano, Hawaii: An assessment using airborne lidar data, P.J. Mouginis-Mark and H. Garbeil, 96:149

Training sample

On the relationship between training sample size and data dimensionality: Monte Carlo analysis of broadband multi-temporal classification, T.G. Van Niel, T.R. McVicar and B. Datt, 98:468

Translation invariance

On the choice of spatial and categorical scale in remote sensing land cover classification, J. Ju, S. Gopal and E.D. Kolaczyk, 96:62

Tree cover continuous fields

A new GLM-based method for mapping tree cover continuous fields using regional MODIS reflectance data, M. Schwarz and N.E. Zimmermann, 95:428

Tree isolation

Automated tree recognition in old growth conifer stands with high resolution digital imagery, D.G. Leckie, F.A. Gougeon, S. Tinis, T. Nelson, C.N. Burnett and D. Paradine, 94:311

Tree floristic classification

Hyperspectral discrimination of tropical rain forest tree species at leaf to crown scales, M.L. Clark, D.A. Roberts and D.B. Clark, 96:375

Trees

Shadow allometry: Estimating tree structural parameters using hyperspatial image analysis, J.A. Greenberg, S.Z. Dobrowski and S.L. Ustin, 97:15

Tropical rain forest

Hyperspectral discrimination of tropical rain forest tree species at leaf to crown scales, M.L. Clark, D.A. Roberts and D.B. Clark, 96:375

Tundra plants

Modelling local distribution of an Arctic dwarf shrub indicates an important role for remote sensing of snow cover, P.S.A. Beck, E. Kalmbach, D. Joly, A. Stien and L. Nilsen, 98:110

Turbid productive waters

Assessing the potential of SeaWiFS and MODIS for estimating chlorophyll concentration in turbid productive waters using red and near-infrared bands, G. Dall'Olmo, A.A. Gitelson, D.C. Rundquist, B. Leavitt, T. Barrow and J.C. Holz, 96:176

Two-band vegetation indices

Ganges and Indus river basin land use/land cover (LULC) and irrigated area mapping using continuous streams of MODIS data, P.S. Thenkabail, M. Schull and H. Tural, 95:317

Ultramafic complex

Lithologic mapping of the Mordor, NT, Australia ultramafic complex by using the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER), L.C. Rowan, J.C. Mars and C.J. Simpson, 99:105

Uncertainty

Quantifying the uncertainty in passive microwave snow water equivalent observations, J.L. Foster, C. Sun, J.P. Walker, R. Kelly, A. Chang, J. Dong and H. Powell, 94:187

Assessing the potential of SeaWiFS and MODIS for estimating chlorophyll concentration in turbid productive waters using red and near-infrared bands, G. Dall'Olmo, A.A. Gitelson, D.C. Rundquist, B. Leavitt, T. Barrow and J.C. Holz, 96:176

Factors affecting remotely sensed snow water equivalent uncertainty, J. Dong, J.P. Walker and P.R. Houser, 97:68

Understory

BRDF measurement of understory vegetation in pine forests: dwarf shrubs, lichen, and moss, J.I. Peltoniemi, S. Kaasalainen, J. N  r  nen, M. Rautiainen, P. Stenberg, H. Smolander, S. Smolander and P. Voipio, 94:343

Urban

Assessments of urban growth in the Tampa Bay watershed using remote sensing data, G. Xian and M. Crane, 97:203

Urban area mapping

Assessing the accuracy of satellite derived global and national urban maps in Kenya, A.J. Tatem, A.M. Noor and S.I. Hay, 96:87

Urban areas

Mapping ground subsidence induced by aquifer overexploitation using advanced Differential SAR Interferometry: Vega Media of the Segura River (SE Spain) case study, R. Tom  s, Y. M  rquez, J.M. Lopez-Sanchez, J. Delgado, P. Blanco, J.J. Mallorqui, M. Mart  nez, G. Herrera and J. Mulas, 98:269

Urban ecology

Assessment of ASTER land cover and MODIS NDVI data at multiple scales for ecological characterization of an arid urban center, W.L. Stefanov and M. Netzbund, 99:31

Urbanization

Assessing the accuracy of satellite derived global and national urban maps in Kenya, A.J. Tatem, A.M. Noor and S.I. Hay, 96:87

Urban remote sensing

Spectral mixture analysis for subpixel vegetation fractions in the urban environment: How to incorporate endmember variability?, C. Song, 95:248

Validation

Intercomparison of ground-based microwave remote sensing measurements of stratospheric ozone over the Mendoza region, Argentina with HALOE data, C.M. Puliafito and S.E. Puliafito, 94:61

Estimating evapotranspiration of European forests from NOAA-imagery at satellite overpass time: Towards an operational processing chain for integrated optical and thermal sensor data products, W.W. Verstraeten, F. Veroustraete and J. Feyen, 96:256

Evaluation of seasonal variation of MODIS derived leaf area index at two European deciduous broadleaf forest sites, Q. Wang, J. Tenhunen, N.Q. Dinh, M. Reichstein, D. Otieno, A. Granier and K. Pilegaard, 96:475

Vectorization

Shadow allometry: Estimating tree structural parameters using hyperspatial image analysis, J.A. Greenberg, S.Z. Dobrowski and S.L. Ustin, 97:15

Vegetation

A data mining approach for understanding topographic control on climate-induced inter-annual vegetation variability over the United States, A.B. White, P. Kumar and D. Tchong, 98:1

Optimization of sampling schemes for vegetation mapping using fuzzy classification, R. Tapia, A. Stein and W. Bijker, 99:425

VEGETATION

Quality assessment and improvement of temporally composited products of remotely sensed imagery by combination of VEGETATION 1 and 2 images, O. Hagolle, A. Lobo, P. Maisongrande, F. Cabot, B. Duchemin and A. De Pereyra, 94:172

On the relationship of NDVI with leaf area index in a deciduous forest site, Q. Wang, S. Adiku, J. Tenhunen and A. Granier, 94:244

Vegetation canopy

Simple parameterizations of the radiation budget of uniform broadleaved and coniferous canopies, S. Smolander and P. Stenberg, 94:355

Vegetation canopy scattering

Ground-penetrating radar measurement of crop and surface water content dynamics, G. Serbin and D. Or, 96:119

Vegetation classification

Classification of Amazonian primary rain forest vegetation using Landsat ETM+ satellite imagery, K.J. Salovaara, S. Thessler, R.N. Malik and H. Tuomisto, 97:39

Vegetation clumping index

Global mapping of foliage clumping index using multi-angular satellite data, J.M. Chen, C.H. Menges and S.G. Leblanc, 97:447

Vegetation functioning model

Using coarse remote sensing radar observations to control the trajectory of a simple Sahelian land surface model, L. Jarlan, E. Mougin, P. Mazzega, M. Schoenauer, Y. Tracol, P. Hiernaux, 94:269

Vegetation index

Satellite-based modeling of gross primary production in a seasonally moist tropical evergreen forest, X. Xiao, Q. Zhang, S. Saleska, L. Hutrya, P. De Camargo, S. Wofsy, S. Frolking, S. Boles, M. Keller and B. Moore III, 94:105

Vegetation indices

Remote sensing of forest biophysical variables using HyMap imaging spectrometer data, M. Schlerf, C. Atzberger and J. Hill, 95:177

Vegetation mapping

Towards operational monitoring of a northern wetland using geomatics-based techniques, J. T  yr   and A. Pietroniro, 97:174

Vegetation photosynthesis model

Satellite-based modeling of gross primary production in a seasonally moist tropical evergreen forest, X. Xiao, Q. Zhang, S. Saleska, L. Hutrya, P. De Camargo, S. Wofsy, S. Frolking, S. Boles, M. Keller and B. Moore III, 94:105

VEGETATION sensor

Land cover change detection at coarse spatial scales based on iterative estimation and previous state information, S. Le Hégarat-Masclé, C. Ottlé and C. Guérin, 95:464

Vegetation stress

Application of AVIRIS data in detection of oil-induced vegetation stress and cover change at Jornada, New Mexico, L. Li, S.L. Ustin and M. Lay, 94:1

Vegetation water content

Vegetation water content estimation for corn and soybeans using spectral indices derived from MODIS near- and short-wave infrared bands, D. Chen, J. Huang and T.J. Jackson, 98:225

Venice

Mapping regional land displacements in the Venice coastland by an integrated monitoring system, P. Teatini, L. Tosi, T. Strozzi, L. Carbognin, U. Wegmüller and F. Rizzetto, 98:403

VGT

Landsat-7 ETM+ radiometric normalization comparison for northern mapping applications, I. Olthof, D. Pouliot, R. Fernandes and R. Latifovic, 95:388

Vicarious calibration

Vicarious calibration of MERIS over dark waters in the near infrared, N. Martiny, R. Santer and I. Smolskaia, 94:475

VIIRS

Multi-platform comparisons of MODIS and AVHRR normalized difference vegetation index data, K. Gallo, L. Ji, B. Reed, J. Eidenshink and J. Dwyer, 99:221

Vine

Assessing vineyard condition with hyperspectral indices: Leaf and canopy reflectance simulation in a row-structured discontinuous canopy, P.J. Zarco-Tejada, A. Berjón, R. López-Lozano, J.R. Miller, P. Martín, V. Cachorro, M.R. González and A. de Frutos, 99:271

Vineyards

Assessing vineyard condition with hyperspectral indices: Leaf and canopy reflectance simulation in a row-structured discontinuous canopy, P.J. Zarco-Tejada, A. Berjón, R. López-Lozano, J.R. Miller, P. Martín, V. Cachorro, M.R. González and A. de Frutos, 99:271

Visible and thermal satellite imagery

Estimating evapotranspiration of European forests from NOAA-imagery at satellite overpass time: Towards an operational processing chain for integrated optical and thermal sensor data products, W.W. Verstraeten, F. Veroustraete and J. Feyen, 96:256

Visible remote sensing

Detection of blue-absorbing aerosols using near infrared and visible (ocean color) remote sensing observations, D. Nobileau and D. Antoine, 95:368

Vitis vinifera

Assessing vineyard condition with hyperspectral indices: Leaf and canopy reflectance simulation in a row-structured discontinuous canopy, P.J. Zarco-Tejada, A. Berjón, R. López-Lozano, J.R. Miller, P. Martín, V. Cachorro, M.R. González and A. de Frutos, 99:271

Volcanoes

Mineral mapping on the Chilean-Bolivian Altiplano using co-orbital ALI, ASTER and Hyperion imagery: Data dimensionality issues and solutions, B.E. Hubbard and J.K. Crowley, 99:173

120° 00'–117° 00' W

Stormwater runoff plumes observed by SeaWiFS radiometer in the Southern California Bight, N.P. Nezlin, P.M. DiGiacomo, E.D. Stein and D. Ackerman, 98:494

121–116° W

Spatial and temporal patterns of remotely-sensed and field-measured rainfall in southern California, N.P. Nezlin and E.D. Stein, 96:228

Water-leaving radiance

Red tide detection and tracing using MODIS fluorescence data: A regional example in SW Florida coastal waters, C. Hu, F.E. Muller-Karger, C.(Judd) Taylor, K.L. Carder, C. Kelble, E. Johns and C.A. Heil, 97:311

An improved in-situ bio-optical data set for ocean color algorithm development and satellite data product validation, P.J. Werdell and S.W. Bailey, 98:122

Wake effects

Wake effects of large offshore wind farms identified from satellite SAR, M.B. Christiansen and C.B. Hasager, 98:251

Water balance

Evapotranspiration on western U.S. rivers estimated using the Enhanced Vegetation Index from MODIS and data from eddy covariance and Bowen ratio flux towers, P.L. Nagler, R.L. Scott, C. Westenberg, J.R. Cleverly, E.P. Glenn and A.R. Huete, 97:337

Water level and water volume variation

Floodplain water storage in the Negro River basin estimated from microwave remote sensing of inundation area and water levels, F. Frappart, F. Seyler, J.-M. Martinez, J.G. León and A. Cazenave, 99:387

Water potential

Spectral sensing of foliar water conditions in two co-occurring conifer species: *Pinus edulis* and *Juniperus monosperma*, H.C. Stimson, D.D. Breshears, S.L. Ustin and S.C. Kefauver, 96:108

Water quality

Characterizing partial upwellings and surface circulation at Lake Tahoe, California-Nevada, USA with thermal infrared images, T.E. Steissberg, S.J. Hook and S.G. Schladow, 99:2

Water quality parameters/spatial and temporal distributions

Operational algorithm for the retrieval of water quality in the Great Lakes, D. Pozdnyakov, R. Shuchman, A. Korosov and C. Hatt, 97:352

Watershed

Assessments of urban growth in the Tampa Bay watershed using remote sensing data, G. Xian and M. Crane, 97:203

Water vapor remote sensing

Comparison of active and passive water vapor remote sensing from space: An analysis based on the simulated performance of IASI and space borne differential absorption lidar, V. Wulfmeyer, H. Bauer, P. Di Girolamo and C. Serio, 95:211

Wavelet analysis

Application of wavelet analysis to the study of spatial pattern of morphotectonic lineaments in digital terrain models. A case study, G. Jordan and B. Schott, 94:31

Wavelet transform

A crop phenology detection method using time-series MODIS data, T. Sakamoto, M. Yokozawa, H. Toritani, M. Shibayama, N. Ishitsuka and H. Ohno, 96:366

Weight percent

Mapping variations in weight percent silica measured from multispectral thermal infrared imagery—Examples from the Hiller Mountains, Nevada, USA and Tres Virgenes-La Reforma, Baja California Sur, Mexico, S.J. Hook, J.E. Dmochowski, K.A. Howard, L.C. Rowan, K.E. Karlstrom and J.M. Stock, 95:273

Weighted kappa

A new GLM-based method for mapping tree cover continuous fields using regional MODIS reflectance data, M. Schwarz and N.E. Zimmermann, 95:428

Weighted mean shortest distance

Optimal field sampling for targeting minerals using hyperspectral data, P. Debba, F.J.A. van Ruitenbeek, F.D. van der Meer, E.J.M. Carranza and A. Stein, 99:373

Wetland

Towards operational monitoring of a northern wetland using geomatics-based techniques, J. Töyrä and A. Pietroniro, 97:174

Wildlife habitat

Classification of Amazonian primary rain forest vegetation using Landsat ETM+ satellite imagery, K.J. Salovaara, S. Thessler, R.N. Malik and H. Tuomisto, 97:39

Wildlife occurrence

Using the spatial and spectral precision of satellite imagery to predict wildlife occurrence patterns, E.J. Laurent, H. Shi, D. Gatzliolis, J.P. LeBouton, M.B. Walters and J. Liu, 97:249

Wind

Spatial and temporal patterns of remotely-sensed and field-measured rainfall in southern California, N.P. Nezlin and E.D. Stein, 96:228

Wind energy

Wake effects of large offshore wind farms identified from satellite SAR, M.B. Christiansen and C.B. Hasager, 98:251

Wind erosion

Mapping North African landforms using continental scale unmixing of MODIS imagery, J.-A.C. Ballantine, G.S. Okin, D.E. Prentiss and D.A. Roberts, 97:470

Wind scatterometer

Using coarse remote sensing radar observations to control the trajectory of a simple Sahelian land surface model, L. Jarlan, E. Mougin, P. Mazzega, M. Schoenauer, Y. Tracol, P. Hiernaux, 94:269

Wind turbines

Wake effects of large offshore wind farms identified from satellite SAR, M.B. Christiansen and C.B. Hasager, 98:251